

Students deny plot to get British cash

by Mark Jackson

Fear of forced labour is the main factor behind the sudden influx of young black Rhodesian students to Britain. A widespread belief that the Smith regime has embarked on a secret drive to force unemployed teenagers into military service or compulsory labour is producing a panic exodus from Rhodesia. Newly arrived students plan to tell the annual congress of the National Union of Zimbabwe Students in London this weekend of friends whom they allege have been kidnapped by the authorities. Some have stories of their own narrow escapes.

The students are angry about press reports that their union has encouraged them to come to Britain as part of a political manoeuvre aimed at forcing the British Government to spend some of the £50m it had promised to spend on Rhodesian black education in the 1972 Pearce report. The union leaders say that the reports are based on a remark at a press conference last week by one executive member, which they immediately repudiated.

Mr Jonson Mithelwa, former vice-chairman of the Southern Rhodesian African Teachers' Union, who is a leading member of the NUZS education committee, said: "The youngsters are affronted by the suggestion that they are pawns in some political game. They have made great sacrifices to get here. The underlying motive is their desperate desire for education, but the immediate reason now is that they are very frightened. Most of them believe that if they do not get away they are in danger of being forced into labour camps or the army."

Mr Mithelwa and a group of the committee are pressing the union for a formal inquiry. They include a leading union member

who says that a close relative has given him an eyewitness account of how a group of his friends were kidnapped.

If the NUZS executive goes ahead the report could be completed within a month. The evidence will then be presented to the Foreign Office or to international bodies such as the Organization of African Unity.

Meanwhile, the executive are concentrating on trying to mend the damage which they fear has been caused both to the students' cause in Britain and to their own unity by the press reports of the plot against the British Government.

The member who had boasted of its existence is Mr Herbert Mushevanhu—a prominent member of the more politically-oriented Campaign for the Release of Rhodesian Detainees. He is likely to be hauled over the coals at a meeting of the executive today.

The union's treasurer, Mr Ben Dlamini said: "It was a complete misrepresentation of our policy. Our goal is to ensure that those who are already here are properly provided for."

Mr Jabu Moyo, a 20-year-old Rhodesian who has just arrived in London to train as an automobile engineer said this week: "I don't know if any one had any political motive for wanting me here, but all I am interested in is getting more education. The union has helped me with accommodation, but I came here entirely by my own efforts and with money that my brother-in-law and other relations raised for me."

The Foreign Office say they cannot confirm whether the Smith régime has embarked on an operation of this kind, but say that in view of Salisbury's practice of arbitrary arrest and its tight control over the media, they are not surprised that a rumour of this kind is circulating freely.

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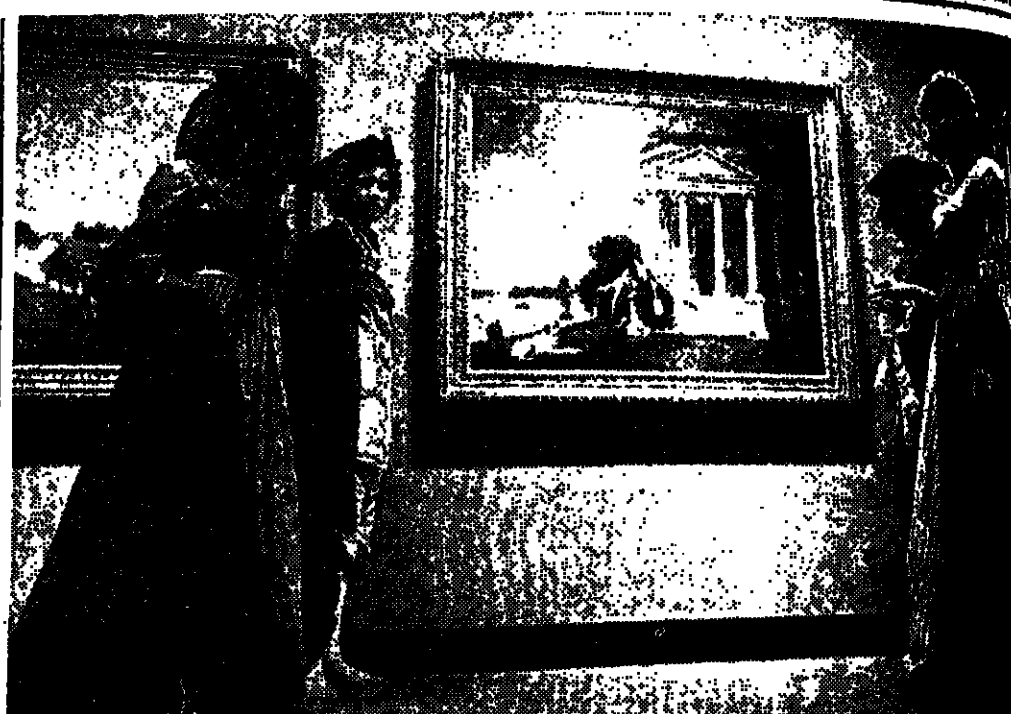
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Pupils from William Penn school, Herne Hill, model costumes loaned by the ILEA to match the play at the Georgian Playhouse exhibition, Hayward Gallery on London's South Bank.

'Fair shares' for middle schools

Middle schools receive an unfairly small share of funds and resources given out by local education authorities, a conference was told at a meeting of the executive today.

Mr Ronald Fell, head of Rivington and Blackrod High School in Bolton, Lancashire, told a conference on middle schools at Bradford University that he was "concerned that these schools, like primary schools, received 'so small a share of the funds and resources assigned to education'."

Another speaker said that teachers in middle schools had poorer prospects of promotion.

It's go again for STOPP

The society of Teachers Opposed to Physical Punishment are to continue. But they will have to choose a new committee.

A recent letter to STOPP's 400 members said the society's future was in doubt because the present committee of five were all full-time teachers and could not continue without either a substantial increase in active members or a full-time professional worker, which they could not afford.

STOPP has been campaigning for seven years for a law banning corporal punishment in schools. Mr Nicholas Peacey, president of the society, told the meeting of 20 people in London last week: "We

are now at the stage where we could push to a conclusion a motion to dissolve the society and start a new one."

Apart from dissolving the 400 members were given other choices. These were: to try to find a full-time professional worker, or to try to find a full-time professional worker, or to try to find a full-time professional worker.

In the past the society has been involved in cases, and lectures, and helped a Penguin Education Special meeting new members. At the meeting last week the North London Teachers' Association rejected a resolution to back the strike by about 110 votes to 70.

At a meeting on Monday, the managers voted that they should accept a formal complaint to the ILEA about the conduct of the seven strikers.

The managers also asked the ILEA to ensure that teaching at the school would be put on a

PERSONAL COLUMN

John Vaizey A kind of youth-anasia

Low this diagnosis was, as an analysis of student militancy (and many other things) but also that the generation gap almost certainly never existed. Most families were as close as they had ever been and the gap reflected the experience of families which were in any case breaking up for other and more profound reasons than that they contained people of different generations within them. That there is some kind of fundamental change going on about attitudes to the future is absolutely central to the discussion.

Meanwhile, of course, since the era of population growth appears to be over for the present, the effects on education are profound. In the first place, the apparent radical cuts predicted by being initiated by the Labour Government are not so much radical as they seem in the long run, provided that the fall in population continues.

In the past we have had to bet that the rise in population would go on and on, in order prudently to make provision for the future of the education system. But now the wiser course quite clearly is to assume that the population will continue to decline. Certainly we know that within the next 15 years the school population will do so.

study of the evidence, whether these savings and cuts of school rolls are evidence of popularity or unpopularity of different schools, or evidence of a population shift in inner city areas, is not rapidly, and that the numbers of school are empty.

The impact of this situation on the schools, and in particular on the inner city schools, is a question now in the air. It is a question which has troubled the views of members of the Education Authority for some time.

The Education Authority has adopted a solution which is to adopt some of the inner city schools, particularly the schools which are empty.

Many parents for various reasons have a deep dislike of inner city schools. Despite the fact that the schools do not have the reputation of being "bad" schools, they are not popular with many parents and teachers, and there is a great volume of public opinion which ought to be listened to.

By far the wisest course is to concentrate on reducing the number of inner city schools, rather than on closing down schools. I would like to see a rational consideration of the inner city schools, and a decision as to whether they should be kept or not.

Mr Ral Ewing, for the new Luton College, said: "Although the proposal would severely restrict our professional staff, it would not restrict our intake of teacher-training students in September while the study was taking place."

Defiant Tyndale staff fight on

by Bob Doe

The striking headmaster and teachers from William Tyndale junior school in Islington, North London, were teaching again this week—but in a make-do classroom in a local chapel hall. When the seven walked out of the school last week, the Inner London Education Authority reopened it, and are now running it with the help of peripatetic and advisory teachers.

Early this week nearly 30 children from the roll of 114 were attending the alternative school. By Wednesday 76 were attending the official school. "We are providing a service for parents who wish to support us," said Mr Terry Ellis, the headmaster.

The teachers are striking for a fully independent inquiry into the action of the school managers who, they say, have harassed them for political reasons. They also want access to documents that they say would support their case, but which the ILEA have said are confidential.

Their action was precipitated last week by the authority's decision to go ahead with an inspection of the school as a preliminary to the public inquiry due to start on October 27.

The teachers' action means that they may now face disciplinary action from both the ILEA and the National Union of Teachers.

Mr Fred Jarvis, general secretary of the NUT, wrote to the teachers again this week and repeated that they should return to school. The local NUT association, who had previously backed the teachers, have drawn the line at striking and have accepted ILEA's right to inspect the school. At the same time, the North London Teachers' Association rejected a resolution to back the strike by about 110 votes to 70.

At a meeting on Monday, the managers voted that they should accept a formal complaint to the ILEA about the conduct of the seven strikers.

The managers also asked the ILEA to ensure that teaching at the school would be put on a

permanent, full-time basis as soon as possible. The education officer, Dr Eric Briant, now has to decide whether to set up a disciplinary tribunal, as normally happens after a formal complaint from governing bodies. But the strikers claim he cannot do this because it would prejudice the inquiry already set up by the ILEA.

The chairman of the managers, Mr Brian Tennant, said it was up to the authority to decide whether to discipline, suspend or sack the teachers. The managers just wanted some ruling on the status of the striking teachers so that they could be kept out of the school.

The question of whether the head and one teacher, Mr Brian Hadow, were still entitled to their rights as managers also had to be cleared up, he said.

On Tuesday the impromptu classroom round the corner from the school attracted 27 children. While other teachers were away speaking in other schools, Mr Ellis and an unemployed teacher supporter were on the rota for that day.

Using games, paper and pencils brought from teachers' homes or bought with the strike fund of about £100, Mr Ellis claimed that the school was as good there as at the official school, with three or four changes of teacher in the past fortnight and teachers who don't relate to the kids.

The building they rent for £15 a week is a Victorian Mission hall with hall and tables in a dingy back room. The children were drawing, playing games such as draughts and Scrabble, or reading comics in what Mr Ellis called a "relaxing session before lunch."

The meal was cooked by parents in an adjacent kitchen, and afterwards if the weather improved, they had promised to take the children to the park to play football.

But the atmosphere was unruly, with the few trying to read or play being disrupted by the others. Mr Ellis was constantly breaking up fights and calling for less "effing and blinding". The alternative school attracted mainly the most difficult children, he said.

The main school on the other hand, normally generously staffed with eight teachers and one part-timer for the 114, this week had

seven teachers for 70 children. They included two heads seconded to the authority's advisory service, Mrs E. M. Scott, from Copenhagen Infants' School, Islington, and Miss Edith Kahn, of Fleet Primary School, Hampstead, four peripatetic teachers, and Mrs Irene Clowles, the deputy head who has continued to work at the school. A part-time teacher, Mr David Austin, has resigned: he supported the cause but not the strike.

Emerging from a lunchtime staff meeting, Mrs Scott declined to comment on how the takeover was progressing. "I have been told to say nothing," she said.

The parents' club on the alternative side have all signed waivers absolving the teachers of responsibility for their children. The strikers are investigating insurance cover and DES registration.

At the moment though, they are working on a day-to-day basis, and not trying to attract children away from the school.

Mr Ellis believes there is little doubt that a determined authority could involve various agencies to shut the school down for some months by a group of parents involved in a dispute with the ILEA, and the strikers say that if the Education Authority Council acted now against them it would confirm their suspicions that they were being used by the local council in their own struggle against the ILEA.

Mr Ellis said their return to work depended on the answers their lawyers got from Mr Robin Auld, the independent chairman of the inquiry panel, about what documents would be available to the teachers to prepare their case. They want to see records of meetings between the managers and ILEA, the petition sent to the ILEA, and records of an inspection carried out earlier this year.

The composition of the panel of inquiry was announced this week. Apart from Mr Auld there will be two Labour members of the ILEA, Mrs Dora Loftus and Mrs Laila Campbell, a Conservative member, Mr Reginald Watts, and Mr George Carter, headmaster of Isaac Newton Comprehensive school in Notting Hill.

ILEA lose 428 places

Four out of the six teacher training institutions run by the Inner London Education Authority will lose fewer places in inner London by 428 in 2,272. These will be shared between six colleges and polytechnics.

Even with in-service training, places counted in, four of the six would have fewer than the 600-700 students considered to be the minimum viable level for the City of Education Authority will reduce places in inner London by 428 in 2,272. These will be shared between six colleges and polytechnics.

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Row brewing over ban on rising-fives

Education authorities in the large urban areas are expected to go against the Government's advice that the rising-fives should no longer be admitted to infant schools.

The advice was contained in the "standstill" circular sent to local authorities on September 3 by five Government departments, and which set guidelines on how local authorities should make cuts in their expenditure for 1976-77.

Urban authorities—more than the non-metropolitan counties—have been admitting their children to infants' schools earlier and earlier on the grounds that children in city areas need the benefit of an earlier start.

The circular said: "Those local education authorities which have recently allowed children to be admitted full-time to ordinary infant classes on reaching the age of four should review this policy in the interests of economy."

"Rising-fives should not be admitted unless they make no additional call on educational resources and do not prevent the teleplayment of these resources for more essential purposes."

A statement from the education committee of the Association of Metropolitan Authorities said last week that the disastrous educational consequences for outworn financial considerations. "The committee feels that the acceptance of the rising-fives in primary schools has been an important remedy for a shortage of nursery provision."

The committee said that adoption of the government's policy would cause considerable hardship, especially in the large urban areas. One education officer said: "We know

that the DES have always hated the fact that more and more young children have been accepted into reception classes with what they say is inadequate staffing. They have now seen the opportunity to break into this."

Many of the metropolitan authorities are expected to make their cuts at the other end of the age range in further education.

The education committee of the Association of County Councils met last week to discuss the circular and concluded that the DOE should have made it clearer what they meant by a "standstill". They also complained that the Government had not made it sufficiently clear that the present economic crisis was the result of national policies, and not of actions by I.e.s.s.

The Association have argued for some time that while an authority may have a falling or static population, it could well have "differential growth" because population was growing in a part of its area. The education committee felt this was a very important point not covered by the circular.

The executive of the Association of Teachers in Technical Institutions are to ask their 62,000 members to put "maximum pressure" on local authorities and MPs to persuade the Government to withdraw the standstill circular.

The circular, a statement said, indicated no real increase in resources for 1976/77 which "inevitably means a reduction in the standard of the education service". To maintain the present service without any improvement, education needed a "real increase" of between 3 and 5 per cent.

"In spite of the suggestion that there could be an increase of 20,000 full-time equivalent places in further education as a whole, the reality will be either cuts in provision or reductions in the length of courses."

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Keep the young out of prison, say MPs

Last week the Commons Expenditure Committee published the results of an 18-month examination of one of the most criticized laws of recent years—the Children and Young Persons Act 1969.

As well as demanding an end to the practice of sending unruly youngsters to adult prisons, the committee propose new powers for magistrates to lock up young criminals in community homes.

The law, they say, cannot be expected to work without more places in these homes. There must also be a wholesale expansion of facilities to treat young criminals outside the walls of institutions.

Much less use must be made of social workers to administer the law. The Act, says their report, is "not guilty" of pushing children further into crime. No legislation could make any significant difference to the level of juvenile misbehaviour.

While it is true that there is more juvenile crime than before it was passed, the rise "almost exactly parallels" the increase in crime in general.

All children commit offences; most get away with it. Whether a child crosses the boundary between mischief and criminality depends on social deprivation more than on any other factor.

The major failing of the Act is that it has not properly differentiated between most young offenders, who need care, welfare, better education and more support from society, and the minority, "who need strict control and an element of punishment".

What is needed now is a major shift of emphasis away from custody and punishment, and towards intermediate treatment schemes, supervision, and non-residential care like fostering. Most of these changes could take place without changing the law.

The report deals first with one of the most criticized features of the Act: putting children in adult prisons and remand centres because community homes say they are too unruly. This requires the permission of a magistrate and "magistrates must immediately stop giving this permission".

The committee make a number of suggestions to increase the power of magistrates over what happens to a child when it leaves court, to meet the criticism that the law does not sufficiently deter children "in care" from committing crimes.

Social worker and magistrate, they say, must agree on what treatment a child put "in care" will get in a home, or in the community. If circumstances prevent the plan being followed, the court must be notified.

When a child in care does commit more offences, magistrates should be empowered (this would need legislation) to make a "secure care order" to force the local authority to lock the young offender up.

To this end more "secure units" should be built onto community homes, and priority should be given to building more secure places.

This idea has been condemned as retrograde by the British Association of Social Workers and NACRO, the crime prevention body. Both feel that more secure places are a waste of money which could be better spent on non-residential care.

One of the objects of the 1969 Act was to cut down the number of children getting custodial sentences, and give more non-residential care. The reverse has happened, and magistrates have been imposing for example fewer "supervision orders" (the old probation order) and more custodial sentences.

The reason for this, say the committee, is that social workers, not probation officers, are in charge of children under supervision. Many magistrates feel that the "generic" social worker does not know enough about juvenile delinquents and is likely to be too lax.

The committee want magistrates to be able to put a probation officer in charge of a juvenile, and to be able to impose conditions on the way the order is administered. If young people do not cooperate it should be possible to impose fines and make them go to attendance centres on Saturday afternoons.

Social workers in the meantime should get more training in dealing with young criminals, and some of them should specialize.

These measures, the committee hope, will encourage magistrates to keep more young people out of borstal, detention centres, and community homes.

The committee note that two-thirds of the 5,000 young offenders leaving borstals and detention centres every year are reconvicted within a short time. Magistrates, they say, should be able to send children to detention centres for between two days and three weeks, the period when treatment is most likely to be effective if it is going to work at all.

Borstals and detention centres are for the minority, however, and the crucial factor in the 1969 Act has been over community homes—the former approved schools. There are not enough of them. But local authorities have been authorized to spend £23m this year on another 2,300 places.

All be years before the need (about 8,000 places) is met, and in the meantime up to 40 per cent of the places available are empty because there is no staff for them. Agreed moves are afoot to improve the training, pay and status of residential staff, and the committee urges further efforts.

There is no need, they say, for residential staff to have to live in community homes when they are not on duty. They should have their own houses. And more part-timers should be used.

Another reason why it is hard to get young offenders into community homes is that hands were permitted by the 1969 Act to turn them away. The committee say that if heads think that a particular child would spoil life in the home for the rest, they ought to be able to say so. They suggest that heads in an area should form a committee such in turn, and left without proper help.

But the best way to relieve pressure on community homes say the committee is to treat children in the community itself. Up to 80 per cent of children could be outside, at much less cost.

The 1969 Act envisaged a host of intermediate treatment schemes which would provide children with stimulating, demanding activities

Funds dry up for courses for elderly

Some of the empty places in colleges of education could be used to run education courses for the retired, Lord Crowther-Hunt, Minister in charge of higher education, said last week.

Opening a conference at Keele University, on education for the elderly, he said more courses were needed for the over-50s, but public spending cuts meant there would be no extra money for this purpose. Existing buildings could be used more efficiently, retired people could be brought in to take courses, and many old people would take other old people by car to the classes.

By 1980 there would be 15 million over 65, and many would want to live full and satisfying lives. Retirement need not mark the end. "It is a time for retaining a time for creating new and different opportunities for ourselves."

Education had an important part to play, not as a way of filling time, but as a way of making up for lost opportunities and for generating new interests.

One of the basic problems about education for us when we are the low expectations which many people have of us. Far too many assumptions were made about the people's interest, or lack of it, education and about their ability to learn, but it does not mean that a mind necessarily ceases to be active, or that a man's or a woman's interests suddenly become restricted and stereotyped.

In a working paper prepared for the conference, Mr. Sidney Jones, North London Polytechnic, said that the number of old people in universities, further education colleges, polytechnics and colleges of education should have an open invitation to go on existing courses, or to start new ones, and to use the parts of them and the studios, libraries and laboratories. With the advice of college staff, old people could join a variety of different classes, either out of interest or to prepare for a retirement job, such as social work.

The assistance and leadership which this leisure class could offer would be extremely valuable to society. They could work with alcoholics, the mentally retarded, adult illiterates and the housebound elderly themselves. "But good will is not enough: skill, insight and education are essential. These institutions can help to provide."

The benefits to the old people would also be large. "Mental health would be improved, without doubt, when many more older people gained a sense of purpose, of being needed rather than tolerated, or working in company with their peers, and with the young."

The myth about the capacity to learn being reduced by increasing age was tenacious. Everyone had difficulty trying something new. "But if our expectations and those of others are pessimistic, these difficulties will be magnified, because that climate not only justifies but encourages failure."

The educational needs of the elderly were not the same however. Only five per cent of men aged 65 and over had a degree or an equivalent qualification, while 80 per cent had no qualifications at all. More than 80 per cent of retired men and women left school at 14.

There should be opportunities for all three types of older person: those who had had higher education; those who would have gone to university by today's standards but did not have the chance; and those who left school at the minimum age.

Professor Sir Ferguson Anderson, professor of geriatric medicine at Glasgow University, disagreed with the proposal that old people should join existing courses. A few would go on all right, but most would need courses tailored to their special needs and designed to run at a slower pace.



Fun on the buses at the annual playbus rally held last weekend at Keele University.

Leicester to get eighth all-in plan

Leicestershire county council have asked their education officer, Mr. Andrew Fairbairn, to draw up yet another plan for reorganizing secondary schools in the city of Leicester.

Last week the council agreed with the education committee that they should accept a compromise drawn from a combination of two of seven plans originally drawn up by the authority. The two plans are known by their numbers—Six and Seven.

The schools subcommittee and the education committee both favoured Plan Seven. This included a few 11-18 comprehensives, but would have brought the city much closer to the system of 11-14 and 14-18 comprehensive schools established in the old Leicestershire county.

It was originally expected that Plan Seven would go ahead, but a stalemate was reached following a successful campaign against it by parents, teachers and some politicians who preferred Plan Six. This proposed 11-16 comprehensive schools and sixth form colleges.

Now it seems that yet another plan which will be a mixture of Plans Six and Seven, and will probably be called Plan Eight, will eventually be introduced in the city. The county council have called a special meeting for November when they hope to make a final decision, and they could stop selection in the city by September, 1976.

Under Plan Eight the city's existing grammar schools would maintain their present age ranges of 11 to 18 and the secondary modern schools would continue to take children aged 11 to 16.

Mr. Neil Harris, chairman of the education committee, said he was optimistic that the county council would approve the compromise.

"Regrettably, I now regard Plan Seven as unobtainable," he said. "My biggest regret is that the sixth form system will still be partly implemented, which means that many less advantaged children will still be crammed into a few towns schools, the schools which are secondary modern at present—until they are 16."

The compromise plan was an improvement on Plan Six, because it would allow some children in the down town areas to "escape" into all-through comprehensives, he said.

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Workers pay for leavers

Two hundred workers at the Shell fertiliser plant at Billingham, North East, are donating 1 per cent of their wages to pay for three 16-year-old school leavers to become trainees with the company.

The men decided to do this when management announced that they were taking four trainees instead of eight until they were certain of future expansion. The workers, mainly members of the Transport

Music college wins design award

The Royal Northern College of Music in Manchester has won the presidential award for design management given by the Royal Society of Arts. The awards, presented biennially, normally go to commercial firms.

The award was given to the college for its design management in building and interior design. The college has been awarded for its design management in building and interior design.



Shooting & Fishing Questions (CoRT-V)

CoRT THINKING

From Edward de Bono

It is now clear that CoRT Thinking lessons are less direct and more usable than was at first supposed. The programme already seems to be the most widely used in the world for the specific teaching of thinking as a skill. This may result from the simple framework nature of the lessons. But a more likely explanation is the readiness of heads and teachers to do what they have always wanted to do—treat thinking as a skill that can be developed by direct instruction.

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2. Factors involved
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5. Objectives
6. Planning
7. Priorities
8. Alternatives
9. Decisions
10. Viewpoint

CoRT II

1. Recognise
2. Analyse
3. Compare
4. Select
5. Find other ways
6. Start
7. Organise
8. Focus
9. Consolidate
10. Conclude

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RoSLA

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Remedial groups

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Core subject

To provide a cognitive structure for topics investigated in IDE or Integrated Studies.

Head's contact lesson

No formal preparation is required and there is no interference with other subjects. A discussion framework in which a head gets to know his pupils.

Religious Studies

Seen by many teachers as an essential ingredient: making judgments, considering factors, looking at other people's views etc.

General Studies

To balance the emphasis on sheer accumulation of knowledge with some processing skills.

Foundation subject

Schools have time to spend on the right sort of subject in Junior or middle years as a basis for foundation subject for all pupils.

English department

Language and thinking go naturally together. The CoRT framework offers 'thinking' as a situation in which to develop language skills, language for a purpose—not for description.

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COURSES
in this week's issue
appear on pages
10, 14 and 35

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Jobs for the boys



Tony Malton (above) is a model careers master, according to a colleague.

Mark Jackson reports

with very limited resources, makes the individual his absolute priority. That could well serve as a model for careers teachers in his situation."

It was, indeed, because careers work seemed to offer a chance of doing more for the boys as individuals—and more contact with reality—that Mr Malton gave up the headship of the school's remedial department three years ago. In spite of his new title he still spends most of his time on subject teaching; and officially the careers service is run in a morning and afternoon a week.

That service is built around the compilation of a meticulously comprehensive dossier on every pupil. It begins with a full record of a first interview in the boy's fourth year, together with a note of every subsequent discussion. Into it go reports from tutors and class teachers, exam results, work experience reports, job applications, and all correspondence with employers and with anyone else. Each month a progress report on every one of the boys goes to the careers service.

"You really must make a note of everything you discuss with boys—it's not good enough to think you'll remember without, and it's the only way to make sure you'll keep your promises," says Mr Malton.

According to Kent Gostage: "Tony is embarrassingly quick off the mark. Often I'm half way out of the school after seeing a boy when he's already phoning my office to follow up some action we've just

agreed. He does the same when he hears of jobs."

Some of the jobs Mr Malton has already marked for Lincoln Road's personnel managers whom he has taken the trouble to know, or who have learned by chance that he does not try to unsuitable candidates on the many of Peterborough's vacancies. But no boy is to apply until he has discovered out-of-school achievements where relevant, projected in the reference, but not in the facts," says Mr Malton, reference reflects as honestly as the effort they've made.

"Naturally, in times like present we're interested in what we can get them to do. We make it clear that we're employment agency. Our is to help them prepare for it, they'll be happy in it and them the information they set about finding them."

That's where having had experience of various kinds is pretty useful to me. I can kid what it's like working on site in winter or being up in an office all year.

Pupils who have failed to get the chance to go out with the careers head, Mr Malton is available to say to boys involved during his immediately after school hours. They find him in the de which he uses as an office door to his classroom.

Whatever success the school is having in keeping it from the dole queue is not the product of a one-man operation. "I get a lot of support from the rest of the staff, who feed back the information and make sure that ever I put out gets across boys without delay." But he will soon get some help.

"I concentrate on individuals because it's all I have time for. I don't think, but the results might appear to be it's really a substitute for a programme of careers guidance. The kind that helps kids to stand how to cope with the world."

Group to study self-help for jobless

The Government could help unemployed young people by encouraging them to think up projects for themselves and then financing them, a conference organized by the National Association of Youth Clubs decided in London last week.

The association will organize a working party, linked with the council of the National Youth Bureau, to press this view and other imaginative schemes for jobless school leavers on the government.

A similar NAYC conference in the past produced the idea for Community Industry, which the Government now finances. This time youth workers and administrators heard of the Canadian job creation schemes, where millions of dollars are available for enterprises thought up by young people to improve their environment or help the community.

Approved projects are run by the young people themselves with minimal adult supervision. They must do their own bookkeeping and accounting. Work has included toy workshops, pioneer museums, day nurseries and cataloguing libraries.

"We have realized that unemployment does not afflict a person in one monotonous chunk," said Mr Keith Carter of the Canadian High

Commission in London. "There are jobs and then gaps. Schemes like this are designed to fill the gaps creatively, to teach participants how to manage things better."

Self-help projects also greatly reduced bureaucratic costs. "They are a way of getting the oats to the sparrow without going through the horse."

Mr David Brockington of the Avon Youth Association, said efforts to organize Community Industry jobs in Bristol were bogged down in "Kissinger-style" negotiations with officials. Recently, he said, the council there had decided that £10,000 should go on employing two more careers officers. "This would have meant 50 jobs if they had

funded Community Industry," said. "There are 6,000 empty houses, 5,000 people out of work and hundreds of people on the housing list. But local authorities cannot do these sums up and see what can be done."

The Reverend Stuart Mann, director of Community Industry, said the Government would put £2m into the project, which would provide 3,000 jobs at £1,000 a head. But he said only £500,000 would be available for the growing problem of the unemployed. The government's new economic rethinking could do much to solve the problem, he said, but it would be a long-term one.

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Warnock

Year's training urged for hospital work

Hospitals should provide teachers and equipment so that disabled children can continue their education, the National Association for the Welfare of Children in Hospitals says in evidence to the Warnock Committee.

Although all children are entitled to carry on with their education, many hospitals do not provide teaching unless parents ask for it.

The association says all hospitals admitting children should employ a teacher as a member of the paediatric team. Parents should be involved in all educational decisions because they are more likely to be able to judge their child's needs.

Other suggestions include appointing an officer in each I.E.A. with responsibility for the education of children in hospitals, and giving teachers a year's in-service training when they want to work in hospitals.

All babies under the age of one should be screened for deafness, the National Deaf Children's Society say in their evidence.

They urge this because of strong evidence that diagnoses are not always made early enough and because there is too much delay between suspicion and confirmation of deafness.

Teachers of the deaf should get a special allowance, and this might remedy the shortage of specially trained staff. The society says there is a "woefully inadequate" supply of trained child-care staff which is likely to affect the quality of residential schools.

Educational planning for deaf children should be regionally based because the low incidence of deafness in children means many I.E.A.s cannot provide an adequate service. This means children have to travel a long way outside their area to school.

MIND, the National Association for Mental Health, have attacked the "labyrinth of bureaucracy" in hospitals which puts the convenience of the consultants and staff before that of the patient.

In their evidence to the Warnock Committee, inquiring into special education, they say that far too many secretaries make "batch appointments" so that the consultants always has a patient waiting. In some hospitals, if the parent fails to keep an appointment he is not given another for six months as a kind of punishment.

A lot of parents become disillusioned, say MIND, and fail to keep any appointments at all. They are then written off as "uncaring" by the hospital authorities.

Parents have told the association of the insensitive ways in which they have been told of their child's handicap and of the confusing advice they have been given by doctors and paediatricians. All professional people concerned with handicapped children should be trained to advise and help parents with their worries, say MIND. All children should be assessed by the age of six months, say the association, and by the age of three all children suspected of mental handicap or learning difficulties should have been screened. At the moment, too many children slip through the net.

Background to learning

The International Extension College, Cambridge, has begun a research project on how background affects the way people learn. The project, which is designed to be of particular use to educationalists in Africa, will be based on a survey of experience of the problems of learning and teaching, especially as they affect the non-formal education of 10-15 year olds. The project is being financed by a grant from the Ministry of Overseas Development.

Head warns against skimping on staff

Philip Venning reports on the HMC

It would be a bureaucratic folly if the Government put school buildings before teachers, said Mr Jim Woodhouse, headmaster of Rugby, last Thursday.

He told the Headmasters' Conference at Manchester that modern life had created a need for groups—including teaching groups—to be small. "These needs will continue to intensify as the pace of life quickens further, the volume of knowledge grows and the circle of consciousness widens."

Schools would have to meet this need if they were to survive as places where students learned to live with other people and to expand the areas of their concern. "For such learning depends primarily on the strength of the relationships they develop between themselves and with their teachers", he said.

The extension of compulsory schooling had led to rising expectations—not just for money or social equality, but for individual attention, for a closer, less formal contact between teacher and pupil.

It was doubtful whether in the past 100 years there had ever been enough teachers to form groups of the size required by the social conditions of the day. "It is so easy

for governments to be distracted by the need for new buildings—or by the case for new systems—from the paramount need for enough teachers and small enough classes.

"At the present time it is difficult to conceive anything more likely to increase tensions in our society than a significant reduction of teachers in the public sector", he said. He said that flogging had had one advantage that was not recognized until it was abolished: the boys at the top and bottom of the school knew each other and recognized their responsibilities. "It had, however, one great weakness—the lack of any defined responsibilities for those in mid-career, at about the age of 15 or 16."

In a later speech the Reverend Gordon Rupp, professor of ecclesiastical history at Cambridge, said that schools should not remain guilty bystanders to social change. The values of the public schools, and of the western European cultural tradition, were being rejected by progressive Christians out of a sense of cultural guilt. "What has been of value in the long painful growth of order and of freedom, of truth and of social justice, is simply ignored

as having nothing to do with the present world situation", he said.

But there was perhaps more in common between Ivan Illich and Thomas Arnold, and Paulo Freire and Lord Macaulay than might be supposed. Arnold also knew that what was taught in school was only an iceberg-tip of education, and Macaulay knew or sensed that words contained values.

Academics from Plato onwards had assumed that schools were unique institutions for forming the attitudes of future citizens: "We have somehow to play our part, to make our contribution to the social and educational revolution of our time. We have to defend and offer to a wider society all that we have received of greatness from the past."

Ruthless acts of state had destroyed institutions in the past. Some forward looking Christians felt that the loss of tradition was a small thing compared with the gain of wider opportunities for all.

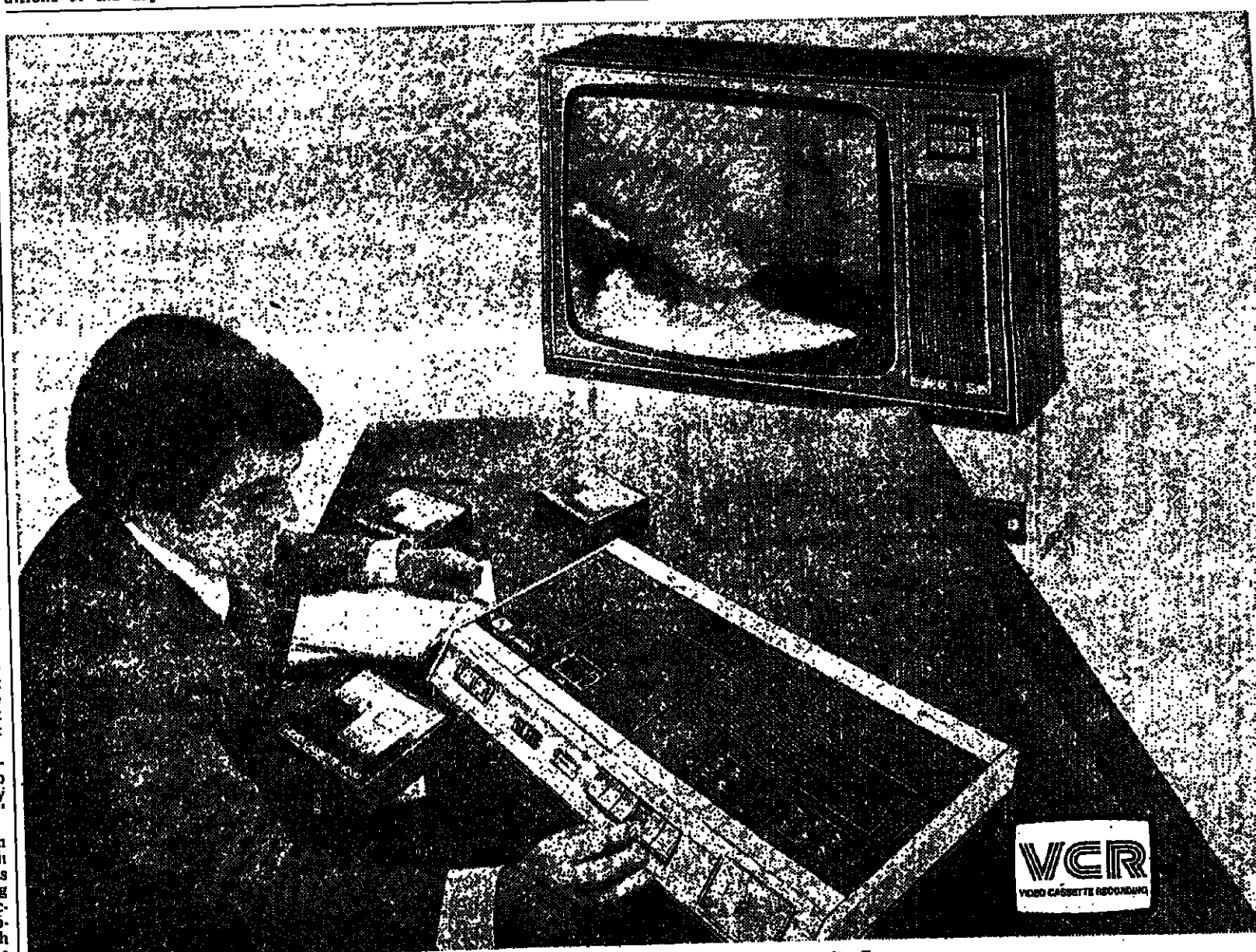
The Reverend Aled Watkin, former head of Downside, said that education should aim to produce people who were fully alive and fully extended: "I wonder how

many parents ask themselves 'What kind of bore will my son be when he is 40?' Anyone who is unaware outside his chosen subject will not only bore others but will bore himself", he said.

Knowledge was a powerful means of making life more interesting and increasing one's awareness. Lucid, accurate and precise thinking was virtually useless without action, and so much action was ineffective because of lack of will-power.

"It is here that we reach the foundation of genuine independence, for it is here that, in the last resort, each must find his own inner strength", he said. All that pupils responsible for what they said or did. "This is the real value of that favoured word 'discipline'. Here is found the real meaning of that favourite word 'maturity'—for discipline lies deeper than mere orderliness and maturity beyond mere growth."

Self expression was only valuable if the pupil looked for real quality. "There is no room for easy methods or of the exploitation of a feeble subjectivity which thinks it need not concern itself with excellence on the grounds that whatever it does must be valuable if it expresses the person himself."



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88. (F) M.A. in Education (Educational Sociology Gap) (also available two-year part-time).

89. (F) M.A. in Education (Educational Anthropology Gap) (also available two-year part-time).

90. (F) M.A. in Education (Educational Linguistics Gap) (also available two-year part-time).

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97. (F) M.A. in Education (Educational Art Gap) (also available two-year part-time).

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102. (F) M.A. in Education (Educational Toys Gap) (also available two-year part-time).

103. (F) M.A. in Education (Educational Materials Gap) (also available two-year part-time).

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106. (F) M.A. in Education (Educational Services Gap) (also available two-year part-time).

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117. (F) M.A. in Education (Educational Museums Gap) (also available two-year part-time).

118. (F) M.A. in Education (Educational Galleries Gap) (also available two-year part-time).

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120. (F) M.A. in Education (Educational Cinemas Gap) (also available two-year part-time).

121. (F) M.A. in Education (Educational Television Gap) (also available two-year part-time).

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124. (F) M.A. in Education (Educational World Wide Web Gap) (also available two-year part-time).

125. (F) M.A. in Education (Educational Global Network Gap) (also available two-year part-time).

126. (F) M.A. in Education (Educational Universal Access Gap) (also available two-year part-time).

127. (F) M.A. in Education (Educational Digital Divide Gap) (also available two-year part-time).

128. (F) M.A. in Education (Educational Information Gap) (also available two-year part-time).

129. (F) M.A. in Education (Educational Knowledge Gap) (also available two-year part-time).

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132. (F) M.A. in Education (Educational Standards Gap) (also available two-year part-time).

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Students from overseas, who are charged higher fees for hotels and tuition, might be able to take their college or education authority to court under the proposed new race relations laws.

Last month's White Paper promised that the new race relations Bill would contain separate provisions to make it unlawful for educational establishments to discriminate on the grounds of race in the provision of any act which would constitute unlawful discrimination.

The Government also intend that the public sector of education should be open to all without racial discrimination.

But overseas students are charged higher prices for college hostels and tuition than home students. In Bradford, for example, foreign students are charged £21 a week for a hostel room while British students pay £12.

Miss Patricia Hewett, general secretary of the National Council for Civil Liberties, said that local authorities and hostels could be charged with breaking the law if the planned legislation goes through.

Tuition fees nationally are now just under £320 a year for overseas students, nearly three times as much as the home rate. Since most British students have their fees paid by

Drive against discrimination

their local authorities, there is a double act of discrimination here, according to the National Union of Students.

The union, along with the NCCL, the Joint Council for the Welfare of Immigrants and the Coordinating Committee for Overseas Students Organizations, launched a campaign last week to fight alleged racial discrimination in further and higher education.

Mr Trevor Phillips, a vice-president of the NUS, said last week that he was alarmed at the "rising trend of discrimination, particularly against students. We hope to press down, the fees in a number of cases."

A joint statement from the four organizations said the Government were hypocritical and dishonest and should put their own house in order by eliminating discriminatory practices.

Students from overseas who were admitted to Britain as visitors but who subsequently had their status altered to allow them to attend college were being harassed, said Mr Phillips.

The Home Office regulations on immigration which allowed visitors to apply for a change in status were being ignored while statements given to immigration officers at the port of entry were brought up in appeals tribunals to prove that visitors had no intention of becoming students.

Even overseas visitors who were allowed to become students found that they were under surveillance to make sure they attended classes regularly. As an example, the NUS produced Mr Shabir Mandan, from Tanzania, who could be arrested at any moment as an illegal immigrant because the Home Office have refused to renew his visa to allow him to complete his studies.

Mr Mandan, who has been accepted by Thames Polytechnic to start a two-year Higher National Diploma course in computing studies from next week, was told by the Home Office to leave the country after two appeals to an immigration tribunal had been turned down.

The first rejection was based on a record of alleged poor attendance at his previous college, Wandsworth Technical, which was subsequently found to be a mistake. The second appeal was turned down because, it was said, he deceived an immigration officer as to his intentions when allowed into the United Kingdom.

Mr Mandan was admitted two years ago on a visitor's visa. He told the immigration officers that he was just a visitor. He subsequently decided to study English and computing, and successfully applied for a change to his visa—a move which is permissible under Home Office regulations. Now he is being denied an extension to his visa because, it is said, he did not state his true intentions two years ago.

"I have been here for two years and I am half-way through my course," Mr Mandan said. "Why won't they let me finish it?"

Mr Paul Crofts, the NUS international student officer who is handling Mr Mandan's case, believes the Home Office want to deport Mr Mandan to prevent him clocking up the five years' residence which will automatically grant him a permanent right of abode.

But Mr Mandan said: "As soon as I finish, I told them, I am ready to leave. They allowed me to stay, why can't I finish it?"

Miss Hewett said there was a danger that the Government might alter the proposals in the White Paper to allow discrimination to continue.

"There is a danger that the Government will give way to temptation to fudge the statistics and immigration laws to come the number of blacks in the country."

There are about 95,000 students from overseas in Britain this year. Nearly three-quarters are paid their own way through college, most being financed by their governments or by industry. Some students are mainly in higher education—about 29,000 in universities. Private students are mainly further education studying for A and A levels.

Students from Common Market countries do not have the same problems over entry to the United Kingdom but pay the same higher, although it is likely that harmonization of tuition fees will soon be introduced, making it cheaper for EEC nationals to study here in Commonwealth or other foreign citizens.

Science diary

by

John Maddox

Is this the end of OPEC's oil bonanza?

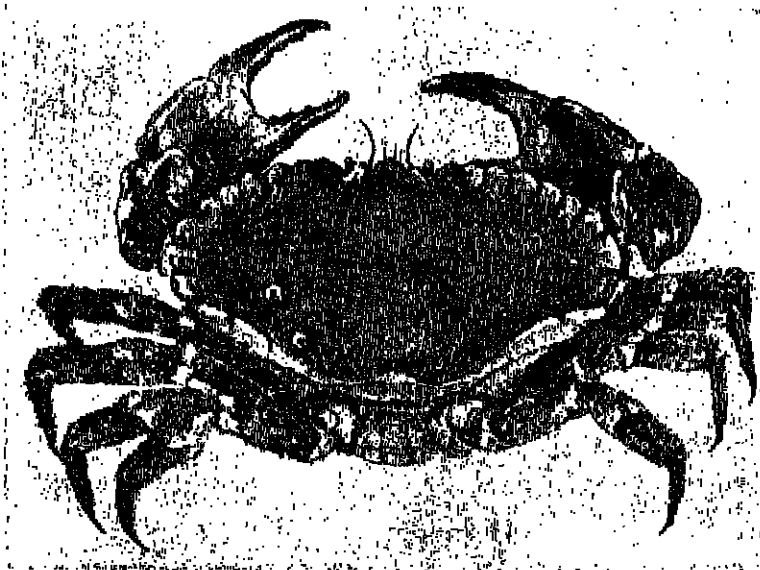
Last week's meeting of the Oil Producing and Exporting Countries in Vienna was the predictable turning point in the organization's fortunes. From now on, it will be much harder for the oil exporters to keep a united front in the face of a declining market for their oil. Indeed, in the next few months nobody will be surprised if at least some members of OPEC are forced to sell oil at below the price now agreed. Libya and Iraq are two of the obvious price-sharers, chiefly because they need the cash.

It is worth reflecting on the chain of events leading to this state of affairs. The present price of oil, \$10.30 a barrel in the Persian Gulf, was fixed from the beginning of 1974. During the following six months prices crept slowly up as the oil companies in the Middle East were required to take increasing proportions of their oil by buying back from the producing governments some of the oil to which governments had become entitled under the terms of their participation agreements with the companies.

Now there is a surplus of oil. Partly because of the world-wide recession but partly because measures of energy economy, inefficient plants may often be seen, are beginning to bite. The result is that exports of crude oil from the Persian Gulf are between 10 and 20 per cent lower this year than last. The oil producers are right to say that, during the past two years, the value of their earnings has declined because of inflation in the West, although it is hard to accept the figures quoted by some of those at last week's meeting—the OPEC secretariat, for example, was holding that inflation has devalued the producers' revenues by 46 per cent. But it is also plain that the oil producers have been affected by much more old-fashioned considerations, and in particular by the old laws of supply and demand. It is hard to increase the price when demand is falling.

Whether we should all throw our hats in the air because logic has caught up with the oil producers is another matter. Some of the countries most affected by the prospect of what amounts to a curtailment of their real earnings from the sale of oil are in a dilemma that could affect us all.

Both Iraq and Algeria, for example, have embarked on programmes of industrialization at a pace entirely without precedent. They have done so not just because this seems in itself worth while but because industrialization appears to be what the poorer sections of the community want. The question now is whether it will be possible for



How crabs fight the fat

We all know that crabs, and crustaceans in general, are odd creatures. One of their peculiarities is that their tissues contain much higher proportions of materials such as cholesterol than those of human beings or, indeed, any other kind of animal.

Superficially, the explanation is simple enough: crabs eat fish and other material containing large amounts of fat. The surprise is that they are able to digest this indigestible diet only by means of a chemical, secreted in their digestive tracts, which is closely analogous to many materials now being used as detergents. Specifically, it is a combination of a 12-carbon fatty acid and a peptide made by the combination of two amino-acids. A team of American biochemists from Pittsburgh and Harvard universities have

now been able to work out precisely what happens in the stomach of a crab (Science, September 26). First of all, the detergent is synthesized in the tissues of crustaceans from relatively simple organic chemicals, principally acetates. Second, the detergent has the effect of making soluble, and thus easily absorbable, two of the steroid-based fats in the digestive tract—lecithins and cholesterol. Indeed, it seems that its continued presence in the circulation of crustaceans is one of the reasons why crabs and similar animals do not simply solidify into parcels of fat.

All this is interesting enough, but what seems to have excited the biochemists is that there is a possibility that the crustacean detergent might be a useful drug to give those people who suffer from disorders of the bile.

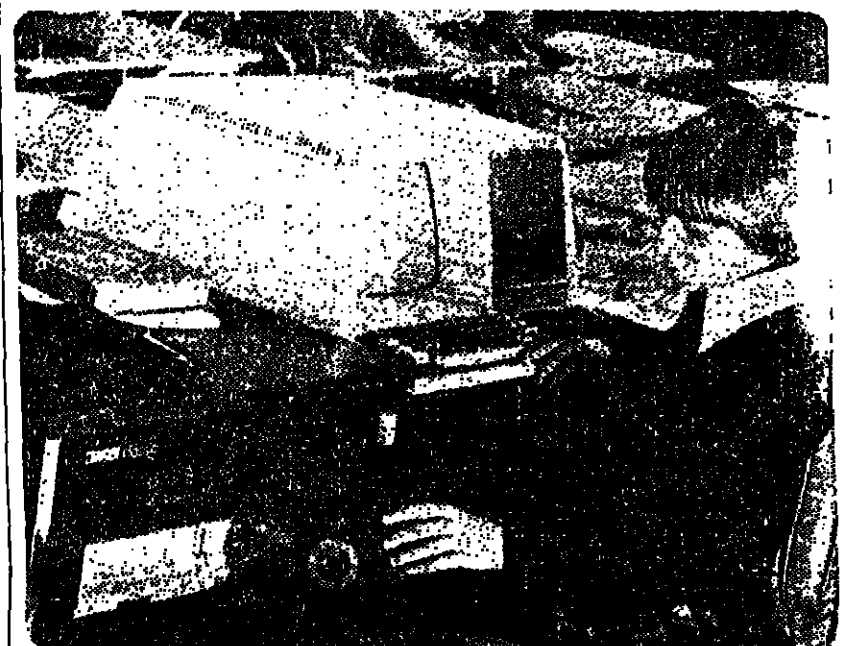
This unhappy, or potentially unhappy, tale raises important questions for the governments likely to be represented at the resumed meeting of the developing and the developed countries in Paris in November. The intention is to see whether, after all, there is a basis for a formal discussion between the two parties on what tends nowadays to be called the "new economic order". This is interpreted by many developing countries as a banner under which it will be possible for them to sell their raw materials to industrialized countries at prices very much higher than those now obtainable.

The lesson that the developing countries with raw materials to sell should now learn is that there is no way of trying permanently to rig the market in their favour. Somehow, the old laws of supply and demand must be accepted, and the demand must come from such an attempt to make water run uphill.

The goal should be to convert raw materials such as copper ore or bauxite into more nearly finished products or metals as far as possible even going to the stage of aluminium castings.

The reason why the developing countries at present rich in copper and aluminium ores do not do this already is that they do not have the capital to build the necessary processing plants and that, even if one day they might, they are confronted with tariff barriers behind which industrialized countries seek to protect their own metal-processing industries from competition.

The 25th of the developing countries next month's meeting should be to win an agreement that this issue should be openly discussed. It has been a long-standing complaint that the United Nations Conference on Trade and Development (UNCTAD) have failed to bring about a liberalization of the rules that govern international trade in fields like this. And the industrialized countries of the world could make a start on solving the problem by saying quite openly that in future they would have no objection to—and no tariffs to prohibit or discourage—the manufacture of plastic buckets in the Middle East.



Schools 'Win a Computer' Competition

jointly sponsored by Computer Weekly and Digital Equipment Company, Ltd.

The prize is a Classic (Classroom Interactive Computer) valued at £5,480—plus training in its use. The competition is open to all schools in both the state and private sectors providing education for pupils between 11 and 18 years of age, in the U.K. The competition will take place in two stages. In the first, schools are invited to submit descriptions of a project involving a minicomputer which the school would like to implement. The five schools submitting the best entries will then go forward to the second stage in which they will be required to implement their projects up to the point at which the minicomputer could be used to provide results. The five teams of finalists will be required to give a presentation and be questioned on their projects by a panel of judges comprising Dr. H. L. W. Jackson, Head of the Department of Computing, North Staffordshire Polytechnic; Mr. J. J. Turnbull, Head of Educational Applications, National Computer Centre; and Mr. W. R. Broderick, Head of Educational Computer Centre, London Borough of Havering. To obtain a copy of the rules and entry form please complete the accompanying coupon and return it to Computer Weekly, Room 118F, Dorset House, Stamford Street, London SE1 9LU. *Special price for educational institutions.

I am interested in entering the schools 'Win a Computer' Competition. Please send me a copy of the Rules.

NAME (BLOCK CAPITALS) _____
SCHOOL _____
ADDRESS _____

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TUNISIA

Tunisia is rich in interest for students of history, geography and sociology—and Aerocruise makes it easy for school parties to jet there at low cost. Aerocruise terms include return travel by Laker Airways. Full-board hotel accommodation (including packed meals when required). Transfers between airport and hotel. All airport taxes. And we allow one free place for every 15 seats booked, 7-night, 8-day visits.

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(*subject to current rate of exchange)

For full details, write or phone: Educational Officer, AEROCRUISE, Laker Aircraft Consolidation Ltd., Gatwick Airport—London, Horley, Surrey. Tel.: 01-865 9383.

Harbuts the 'Plastine' people are pleased to announce the winners of their recent 'Plastine' Modelling Competition.

Long John Silver Rupert Bear Friar Tuck Humpty Dumpty

It's good to know that these four favourite storybook characters are alive and well, and modelled for posterity in 'Plastine'.

The final task of selecting the winners was a difficult one for our two judges, sculptress Jean Walwyn and Editor of Art & Craft in Education, Henry Pluckrose.

In the judges' opinion, the overall standard of the many entries received was extremely high and the subjects chosen were modelled with great imagination and skill.

We would like to express our sincere thanks to all those children who entered the competition. We wish they could all have been winners. Our thanks also to the individual Schools which responded, in particular the teachers who so obviously worked hard to encourage their pupils' efforts.

The winning entrants were:

Category B. 10-13 years
Long John Silver
Modelled by: Rosalind Williams
Date of birth: 23.4.62.
St. Winifred's Convent High School, Decide, Clwyd.
Art Mistress: Mrs. B. Russell
*selected by jury as overall winner in all categories.
Prize: Visit to Louvre, Paris.

Category C. 14-18 years
Rupert Bear
Modelled by: Wendy Hanson
Date of birth: 24.3.60.
Connah's Quay High School, Decide, Clwyd.
Art Teacher: Howard Brownlow
Prize: Visit to Louvre, Paris.

Category A. 7-9 years
Friar Tuck
Modelled by: Jane Bell
Date of birth: 12.7.65.
Crompton Fold County Primary School, Bolton.
Art Teacher: J. Latham
Prize: Visit to Louvre, Paris.

Category D. under 7 years
Humpty Dumpty
Modelled by: Michael Shepherd
Date of birth: 13.10.68.
Lyndhurst Primary School, Peckham, London SE7.
Art Teacher: G. Johnson-Filist
Prize: £25.

The winning entries in categories A, B and C are to be cast in bronze by the Morris Singer Foundry and presented to the Schools.

Certificates of merit will be presented to all children whose models were short-listed.

Congratulations, Michael, enjoy spending your prize.

Congratulations Rosalind, Wendy and Jane, you may now leave the classroom and go to the Louvre.

Harbutt's Plastine Limited
Bathampton Bath BA4 6TA

People



Miss Elizabeth Coulter, head of Princess Gardens School, Melton, is to be head of Sherborne School for Girls in succession to Mrs. Diana Reader Harris, who has retired.

Professor J. S. Anderson, head of inorganic chemistry at Oxford University and formerly director of the National Chemical Laboratory, Tilton, and his associate Dr. J. L. Hutchinson, are to join the solid state chemistry group at the University College of Wales, Aberystwyth.

Mr Peter Bourne, head of photographic studies at the North East London Polytechnic, has been elected to the executive of the Photographers in Europe.

Mr J. Duggan, formerly of inspector of schools, Coventry, is to be hon general secretary of the National Association of Independent and Educational Advisers.

Appointments

Colleges

Mr G. R. Hall, director of Battersea Polytechnic, is to be director of the new East Sussex College of Higher Education at Eastbourne from January 1.

Mr G. R. Tyler, principal of Bath Technical College, is to be director of the new East Sussex College of Higher Education at Eastbourne from January 1.

Schools

Miss Joan Batterill, formerly on the staff of Christchurch Junior School, is to be head of White House School, Wokingham, Surrey.

SPECIAL ANNOUNCEMENTS

CAREERS FOR 76

5-7 November 1975
QUEENS HALL, LEEDS

Opens 10 am. Closes 5 pm (Thursday 6 pm)
Employers, Colleges and Professional bodies will be participating in a major CAREERS CONVENTION in Leeds to assist teachers and students concerned with CAREERS, FURTHER EDUCATION and TRAINING.
Teachers are invited to bring groups of students, and to apply for further information and complimentary tickets to:
CAREERS FOR 76 T. Jarvis (Exhibitions) Ltd.,
31 St. Martin's Lane, Trafalgar Square,
London WC2N 4EY. Tel. 01-838 7836.

A CONFERENCE entitled "CAREERS FOR GIRLS—EQUAL OPPORTUNITIES" will be held on Tuesday 4 November (10.30 am-12.30 pm) together with a Preview of the Exhibition (1.30-3 pm) for careers teachers and their colleagues, careers officers, appointment officers and also sixth form and college students.
Admission will be complimentary and applications for tickets should be made to the address given above.

Supported by The Careers Service
Organized by T. Jarvis (Exhibitions) Ltd.

Soviet Union

Pupils join in assessment

by Kenneth Shaw

Pupils in Soviet schools are assessing the classroom performance of their teachers. The children, using a list of nine qualities, such as love of children, strictness, sense of fairness and the ability to keep control and talk in an interesting manner, rate the teachers on a four-point scale.

The results are being used in research designed to clarify the social-psychological compatibility of teachers and pupils. Preliminary results suggest that high-achievement pupils rate highest those teachers with high pedagogical skills—as determined in separate tests by school principals and external examiners. Low-achievement pupils reserve their praise for relatively unskilled teachers.

Prolonged and detailed observation of the 49 teachers and 155 pupils used in the study, followed by correlation analysis of the data, indicates that the number of classroom actions, especially disciplining actions, increases in proportion to the fall in teacher skills. But highly skilled teachers have a larger repertoire of actions and their use of them is more effective. Of 36 verbal actions used by teachers in their dealings with children the researchers graded the 12 most common for highly and poorly skilled staff. The former use more irony, humour, approval and dialogue and less moralizing, threatening, name-mentioning and voice-raising behaviour than teachers with low levels of pedagogical skills.

One of the factors being used to analyse compatibility in the teacher-pupil system is the number of personal remarks made to the pupils. The researchers found that in skilled teachers these remarks are 40 per cent fewer but the variety is much greater. Unskilled teachers tend not to encourage the children as individuals, and are reluctant to show pleasure or give advice and approval.

World's poor nations plan learning drive

from William Farr

PARIS Senior officials of the ministries of education of the 25 least developed countries met at Unesco headquarters here last month to discuss problems of educational development.

The 25 countries were identified in 1971 by the United Nations on the basis of three criteria: a per capita Gross Domestic Product of \$100 or less, an industrial production of 10 per cent or less of total GDP and a literacy rate of 20 per cent or less. The countries are: Afghanistan, Bhutan, Botswana, Burundi, Chad, Dahomey, Ethiopia, Haiti, Laos, Lesotho, Malawi, Mali, Nepal, Niger, Rwanda, Somalia, Sudan, Tanzania, Uganda, Upper Volta, Western Samoa, Yemen Arab Republic and three which were not represented at the meeting—the Maldives, Guinea and Sikkim.

Eighteen of the countries have been independent states for only 15 years or less. Populations range between 150,000 (Maldives) and 1m in five of the countries and between 5m and 25m (Ethiopia) in nine of them. In 1970 their total population was approaching 150m.

According to Unesco figures the total school-age group of six to 15 was 35m and the population enrolled in educational institutions was 8m. The average of the national budgets for education is around 15 per cent of total budgets. Assistance to education coming from outside sources represents on an average around 15 per cent of national education budgets and only 8 per cent of outside assistance in all fields.

The meeting agreed that elitist systems of education inherited from the colonial past must give way to systems designed for all sectors of the population, particularly for the rural population which were at present still neglected.

It was argued that systems concerned primarily with increasing enrolment, centred on academic learning and training for white-collar jobs, had led to heavy dependence on foreign aid and a neglect of the needs of the rural population while there was a critical



demand for skilled workers in agriculture and industry.

Development programmes should be aimed not only at industrial development but equally at improving food production, health and housing. Education should be geared to these tasks.

Participants emphasized the importance of using national languages. For non-formal education activities and in particular for literacy programmes and mass programmes on food and health the use of the vernacular was essential. The participants were aware of the difficulties. In some countries there were political problems regarding which languages should be used. There were also problems regarding the cost of producing teaching materials and training personnel, the limited sphere of application for some small linguistic groups and the limited capacity of language for modern usage due to the lack of technical and scientific terms. In addition contact with the outside world had to be maintained through the use of an international language.

National printing of textbooks was another priority area. Reliance on textbooks from abroad hampered the use of national languages, hindered the development of curricula suited to national environments and was costly.

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Italy

Major Italian contract for Open University

from Dalbert Hallenstein

VERONA The British Open University has just signed an agreement giving Mondadori, Italy's largest publishing house, exclusive distribution rights for Open University material in Italy.

But Signor Giorgio Mondadori, the company's chairman, stressed in Milan last week that he had no plans to set up a British-style Open University teaching system in Italy in the immediate future.

Mondadori intends at first to market the Open University material by distributing it through its own extensive chain of bookshops. Initially much of this will be sold in English, but gradually it is intended to translate everything into Italian, to dub in Italian the audiovisual material and to adapt some of the courses to Italian requirements.

The Italians appear remarkably ripe at the moment for distance-teaching methods at a university level. The success of the workers' courses now being promoted in state schools throughout the country by the industrial unions, in collaboration with the Education Ministry, is one proof of this, many of these workers' courses would adapt themselves perfectly to Open University materials and methods.

Similarly, many of Italy's state one million university students would probably be delighted to have such a system rather than cope with overcrowded, chaotic universities.

The present political climate, however, is not conducive to an innovation such as the Open University. The trend is to found increasing numbers of small local universities. The motive for this is to satisfy local academic requirements, but to give work to the many unemployed young graduates and bureaucrats for the crudest local political advantages.

centralized Open University system based on the British model, which therefore threaten too many vested interests.

The one real hope is that local regional governments, some of which have already expressed interest in the Open University, eventually be able to collaborate in the setting up of university distance-teaching schemes. But this depends on the central Government, which is present, jealously monopolizing radio and television.

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The one real hope is that local regional governments, some of which have already expressed interest in the Open University, eventually be able to collaborate in the setting up of university distance-teaching schemes. But this depends on the central Government, which is present, jealously monopolizing radio and television.

United States



Nativity scene: "unconstitutional".

No room at the school for nativity

from Alison Wolf

WASHINGTON In the most recent of a series of legal decisions outlawing religion in schools, Oregon's Attorney General has forbidden nativity scenes and creches in school buildings while classes are being held.

Attorney General Lee Johnson ruled that, if a creche were set up in a school building, it would be a violation of the First Amendment of the Constitution, which guarantees the separation of church and state would be breached. The creche would not be simply a recognition of a "holiday" season. Instead it would be designed to emphasize the religious aspects of the Christmas season.

The First Amendment of the Constitution stipulates that "Congress shall make no law respecting an establishment of religion or prohibiting the free exercise thereof." But until recently schools included in their curricula among elements of their curriculum the story of the birth of Jesus Christ and the life of the young Jesus, which is one of the huge network of Catholic parochial schools, with their 3.5m pupils.

In recent years, however, the courts have interpreted the First Amendment with its separation of church and state, as forbidding any religious observance in state schools. In 1962, in the landmark case of Engel v. Vitale, the Supreme Court decided that prayers in schools were unconstitutional.

Call to end suspension

from Thomas Cahill

NEW YORK At a time when crime and disruption are on the increase in schools, and parents and others are increasingly demanding that schools exert a stricter discipline over students, the Children's Defence Fund has called for the abolition of suspension.

In a 237-page report the non-profit agency uses the fact that black students are suspended twice as frequently as whites to build its case that suspension is a form of discrimination.

"Some still claim," says the report, "that disproportionate suspensions of black children reflect their own misbehaviour. We have seen—our survey data, our statistics of office of civil rights data and school district suspension reports—that this is not the case."

The report's statistics cover 24,188,681 students in 2,862 school districts, which include 86 per cent of the country's enrolment of students from minority groups.

According to the report, 97 per cent of the more than one million suspensions that black children receive each year are not for dangerous offences. Fighting, however, is the chief cause of suspension, followed by truancy, lateness, behavioural problems and arguments.

Since the beginning of the new school year there have been more teachers' strikes in the United States than there were during the whole of last year, according to figures issued by the National Education Association. The Boston strike makes the 107th so far this year. During all of the 1974-75 school year there were 99 strikes.

ports, interviews with school officials, parents, children and community groups, and a review of the investigations and literature of other groups on school discipline—make plain that disproportionate suspensions of blacks reflect a prevailing school intolerance for children who are different.

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Australia

Foreign language teaching 'in danger of disappearing'

from John Kirkaldy

SYDNEY The teaching of foreign languages in Australian secondary schools has reached a crisis point, according to a report of the Australian Academy of the Humanities.

The 78-page report shows language studies are in danger of disappearing at senior school level in Victoria, Tasmania, South Australia and Western Australia. Queensland remains the last bastion of foreign language teaching, but even there numbers are falling drastically.

Last year only 19 per cent of New South Wales higher school certificate candidates sat for foreign languages, compared with 55 per cent seven years ago. A comparison over the same period in the other states revealed the following figures: Victoria—12 per cent (19), Queensland—28 per cent (21), South Australia—10 per cent (35), Western Australia—11 per cent (23), Tasmania—9 per cent (50).

One of the reasons for this drop, the report says, is the virtual removal of languages from the core of subjects studied in first and second forms. The report also sees a moving away from analytical subjects, such as languages, physics, chemistry and pure mathematics, to more descriptive subjects.

Economics, geography and biology, for example, are booming at the moment in terms of student demands.

The report urges that "language studies should be given a normal place in the core curriculum during the early years of secondary schools. Students who have ability will not then be deprived of the opportunity to study a language because of school policy which in many cases appears to be based on organizational convenience as much on educational principle."

The report justifies the study of a second language because it produces "a sharpened, more critical awareness of the nature of language and a range of verbal perceptiveness that only one language cannot achieve in students." It concludes that this process "affects the capacity of the individual to use and understand his own language more adequately."

The academy, however, may be fighting a losing battle. A recent study showed that French and German are less popular than practical subjects such as music, home science, art, technical drawing and metalwork.

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Unesco

Arabs help out with \$25m

from Our Correspondent

PARIS It is reported here that a group of Arab states has pledged \$25m to help Unesco meet its cash requirements over the coming months.

In July, Unesco asked member states for interest-free loans to cover temporary shortages due to delays in payment by some states of their contributions.

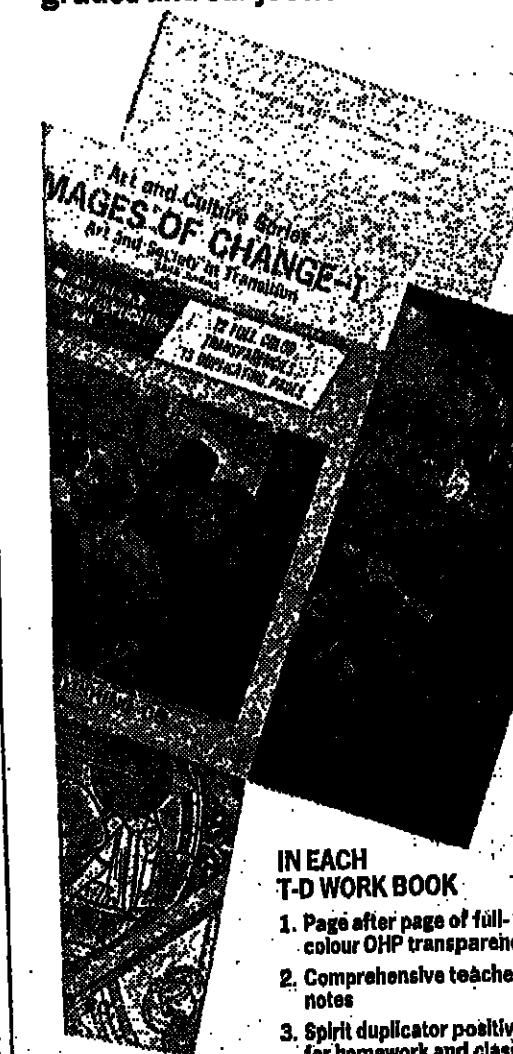
A document placed before the organization's executive board at its meeting last month showed that out of \$78m due for the current year, only \$43m had been received from 86 out of 116 member states. It is usual that some states, particularly larger contributors, pay in instalments. Of the 30 states which had not paid anything for 1975, the United States, the largest contributor, is due for almost \$20m, and also owes \$2.7m for 1973-74.

The United States Congress, in reaction to three resolutions concerning Israel adopted by Unesco's general conference last November, then voted that the United States contribution should be withheld. It would seem that this attitude has not yet changed.

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continue your studies, which could include a postgraduate year at a university. University Cadetships may be available for those on first degree and postgraduate certificate of education courses. Similar opportunities also exist for women graduates.

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Army Officer

Spain

Headaches as classes return

from William Chislett

MADRID At least 5m of Spain's 8m school children this year be following the "new" plan of general basic education, now in its fifth year, but another 150,000 do not have places and an estimated 1m are being educated under deficient conditions.

In its drive to provide universal compulsory education the Government has built schools in even the smallest villages. The villages are being deserted for towns and their schools falling into ruins. People have moved to the large working-class districts that surround the large cities and in one area outside Madrid, for example, there are 20,000 children of school age and only 2,000 places available.

Another problem this year is the low number of 14-year-olds who have registered for further practical education—called "professional matron." A student must pass his first school evaluation and receive his certificate of general basic education (under the new system) before he can continue with a vocational education and take a bachillerato, which can lead to university or a certificate of professional studies. But if a student fails evaluation he can go on to study at a professional centre. On paper, the programme sounds ideal but in practice it is almost impossible to find a place for a student.

Perhaps the most pressing problem, however, is the lack of pre-school education. Señor Juan Martínez Esteruelas, Minister, has announced that it will have priority this year. Last year only 11,500 children were able to attend state nursery schools, but now 115,000 are registered. Those attending state nurseries were about 511,000 and 417,000 went to private ones.

With 1,428 completed and in operation by the end of 1973, 40 per cent of all under-threes and 45 per cent of its three-to-sixes. Britain, where women make up 37.6 per cent of all workers, has places for only 14 per cent of all its under-fives.

The most improved country was Italy. Unicef's five-year programme launched in 1971 and subsidised by the state and a 0.1 per cent annual wage bill contribution from employers, 3,800 nurseries are in built. With 1,428 completed and in operation by the end of 1973, 40 per cent of all under-threes and 45 per cent of its three-to-sixes. Britain, where women make up 37.6 per cent of all workers, has places for only 14 per cent of all its under-fives.

LETTERS

Richmond ratios: a good average

On September 18 in support of a plea for mixed ability teaching in general he included a comment by Donald Frith who was introduced as "Headmaster, York". Mr Frith's remarks sought the praises of mixed ability teaching, but what most of his listeners would not know, and were not told, is that Mr Frith is head of a selective grammar school with a total ability range covering only the top 18 per cent or 20 per cent of the school population. This is a very different thing from comprehensive ability range covering nearly 100 per cent.

Perhaps one should not be too concerned about Professor Ree's ideas since he concluded his first broadcast, after dismissing the attitude of parents as too examination-orientated, by suggesting that a school's policy and direction should be continually reviewed by a board consisting of people from the local community, like . . . parents!

DEREK COCKROFT,
3 Orchard Close, Dringhouses, York



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NOVELLO
Borough Green, Sevenoaks, Kent

Sir,—We have been concerned for some time at the fragmented image of community education that is presented by educators, local professions and the general public.

A growing body of information and experience is now available, which indicates that a generic base exists for teachers, social workers, youth and community workers and many other related professions. This common base offers a sharing of skills, attitudes and values in the relationship between social workers, groups and individuals in the community.

The lack of clarity in role definition suffered by many workers with a community education element in their title points up the confusion of employers. The existence, however, of such posts clearly acknowledges the importance, which is increasing, of being attached to the role of the professional enabler in a community education setting.

The issue is urgent and the need fundamental; we believe that the solution lies in the foundation of a national institute which would seek to attract as members those concerned to identify, maintain and eventually raise standards of professional practice in the field of community education.

We hope that this letter will foster a dialogue between workers in the field of community education.

D. LEE,
Community Education Centre,
c/o Eburne Junior and Infants School, Deedmore Road,
Coventry.

W. J. PASQUERRELLA,
26 North Street, Middleton,
near Manchester.

M. HENING,
Spring House, Oak Lane,
Keele, Cheshire.

T. M. WALTON,
47 Sompting Road,
Worthing, Sussex.

Slur—I am encouraged to write a letter on reading the crusade written by Mr Mark Jackson (J) 1st who is a number of non-white teachers in Britain's schools.

Nine of us Asian immigrant teachers have recently completed overseas teachers' courses at Walsingham Teachers' College. Our age range, only three have so far jobs.

When there is scarcity of jobs in the professions who are most vulnerable in the frenzy of the fight against inflation, racial discrimination should not be allowed to go unmentioned.

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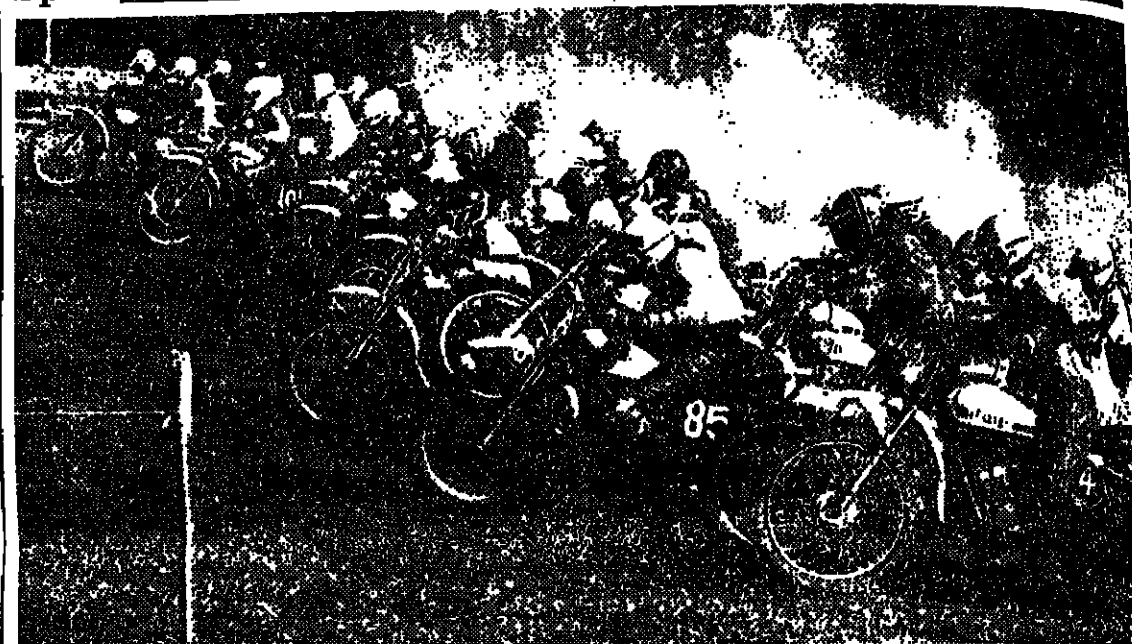
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Sport



Nassey start of an intermediate race.

Motorbikes battle at Naseby

by Asif Khan

Members of the North West Schoolboys' Motor Cycle Club dominated the recent National Youth Scramble Championship at Naseby, Northamptonshire. They won three top prizes, the senior consolation award, and four other prizes.

The only major title they failed to capture was in the senior section race which was won by Paul Hunt, aged 15, who attends St Paul's Comprehensive, Addlestone, Surrey, and is a member of the Horsham Schoolboys' Scramble Club. He rode a German machine, the 125 Malco.

Unlike their ancestors at this famous venue, there was no acrimony among the 170 youngsters who had assembled, under the watchful eyes of their parents. The event was organized for the first time under the aegis of the Auto-Cycle-Union. The boys, aged between six and 16, gave a superb display under treacherous conditions.

For the North West club John Reynolds, aged 12, a pupil of Kimberley Comprehensive, Kimberley, Nottinghamshire, took the intermediate prize on his 98 Suzuki; Russell Brown, aged 10, of The Park Primary School, Tattenhall, Chester, won the junior race on his 80 Aspes, and Mark Condliffe, aged eight, who attends Eyley Primary School, near Holmes Chapel, Cheshire, won the cadet race on his 50 Italjet.

Duncan Adamson, aged 14, who won the senior consolation prize, is a pupil of North Cotes Grammar School, Altrincham. He rode a 125 Yamaha.

The club has 186 members who are mostly drawn from schools in Cheshire, Staffordshire and Lancashire. They hold their own scrambles



Paul Hunt: lone outsider.

ling and race meetings throughout the spring, summer and autumn. They have a "nursery track" in mid-Cheshire where the younger boys are able to practice in safety and under supervision.

The Naseby championship was held round a mile of rough country that presented the young riders with all kinds of hazards and demanded not only skill and stamina but great courage. There were jumps and bumps, a stream and climbs up and down steep hills.

The riders impressed Mr Dick Bracher, general manager of the

ACU, who said the boys demonstrated a "very high standard" of riding. Some of the seniors made the international grade in a couple of years.

Until last year, he said, they competed in championships controlled by a number of organizations. In an effort to end this fragmentation and bring some unity to the schoolboy scene the ACU formed Youth Division towards the end of 1974. Fifty-four youth clubs are now affiliated to the division.

The Naseby scramble was the fourth event this year. The first was a junior trials championship in Hampshire. Others were the track championship in Lancashire and the intermediate and trials championship on York moors.

Although the Junior Motorcycle Federation has gone out of existence, making way for the Youth Division, the British Schoolboy Motorcycle Association is active. "We're hoping they will come into the ACU."

"Our Youth Division is growing rapidly. We started from nothing a year ago, and now we have 54 joined youth clubs." Even girls are joining.

One reason for the growing interest was that they no longer had to wait until they were 16 to take part. "And, of course, a lot of parents are interested and are only too glad to encourage them. You get many of these lads on street corners or at football matches. It is a clean, family pastime."

Only a few schools in Britain have motor cycle clubs of their own. The ACU will "do all we can to help" others. Their address is 31 Belgrave Square, London SW1 8QQ.

ASA looking for coaches

by Stanley Levenson

Schools diving standards are good, but there could be more and better divers if it were not for a shortage of skilled coaches, says Mr John Wardley, a member of the diving committee of the Amateur Swimming Association.

This is a more telling factor than the shortage of proper pools and the ASA are looking for a way out by considering changes in the Teachers' Coaching Certificate.

Mr Wardley illustrates his point about the quality of schools diving by pointing to the number of senior champions and internationalists who will be competing tomorrow in the English Schools' Swimming Association diving and team championships at Highgrove Baths, Eastcote, Middlesex.

Christopher Skedd and Linda Cardew (Davenport) are both ASA diving champions. David Pook (Morden) last year's schools junior champion, competing tomorrow in the intermediates, Janet McGee (London) last year's David Wood (Bushey) last year's intermediate champion and in the senior age grouping and Claire

Piper (Derby) are all British internationalists.

Millfield School, which won six events and came second in a seventh last year, are again strongly represented in the team championships which consist of six freestyle and six medley relays. Six of their swimmers have again come through the qualifying stages to challenge in the finals.

Chesterfield School will be in five events, Bradford Grammar are in four as are Bishop's Stortford College. Surprise absentees are the swimmers from Gregg School, Southampton, who won both intermediate relays last year. Representing their division will be another Southampton school, King Edward's.

Based on times returned in the earlier stages, Heath County Secondary School, Runcorn, and Burnt Mill Comprehensive, Harlow, will be the main contestants in the under-14 (junior) section, with Rutherford School, Newcastle, poised for the boys' titles.

Grange Girls' School, Bradford, and Bishop's Stortford head the lists for the intermediate races.

Vacation courses

Millfield School's successful series of vacation sports and academic courses for young people and families goes marching on. The prospectus for the Christmas and Easter courses is now available, with a range of sporting, academic and artistic activities.

The Easter programme is limited to sports, but the winter schedule offers courses like physical, games, playing, letterpress printing, French, English, sculpture alongside cricket, hockey, football, shooting and swimming. Adults can sign on for all the non-sports classes as well as some of the sports lessons.

Fees for the winter school range from £5 to £17, plus accommodation. And for those living near Stroud, in Somerset, Millfield is to begin next month an indoor cricket evening school.

Millfield's sports roll of honour shows that 25 pupils received national honours in the last academic year, compared with 22 in 1973-74 and 18 in the previous year.

24/25

Common curriculum

26

Children's games

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Lord Hailsham on history

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Books: language; history; literature; politics

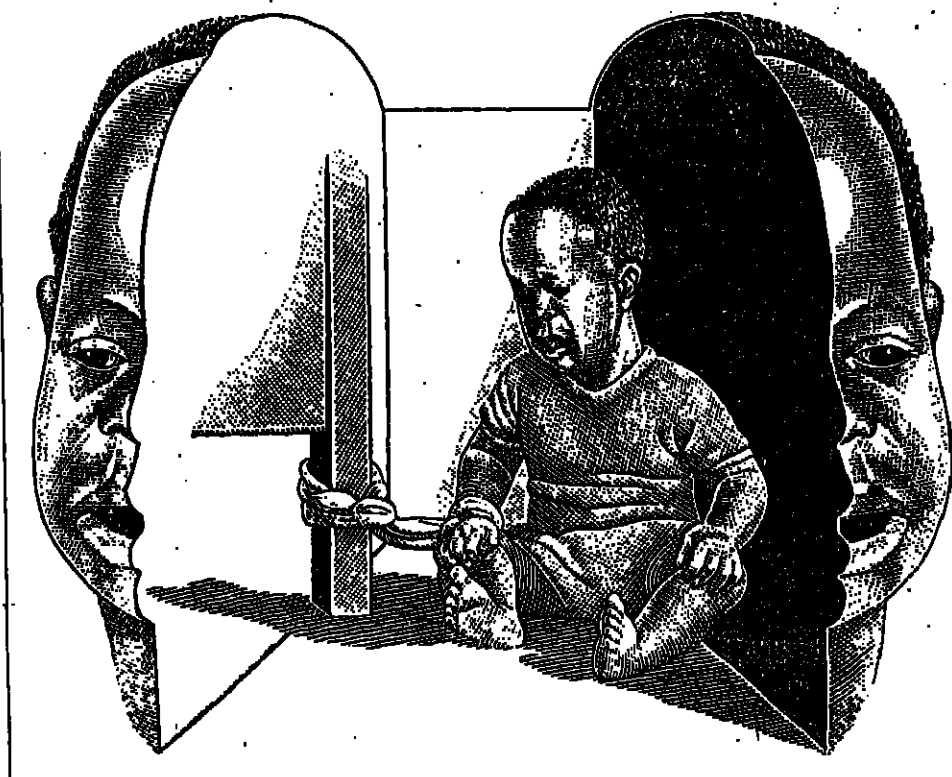
32/34

Computers; a/v equipment; RE

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Talkback: teachers' skill bank

Under five and the wrong colour



Bill Sanderson

Barbara Tizard
argues that existing educational policies
are failing to meet
the needs of young children and parents
from ethnic minority groups

to reach the level of indigenous children in written English.

Unless we want to rear a hereditary caste of black porters, train guards and hospital orderlies, we have to make a more effective educational intervention. True, intervention at the pre-school stage cannot inoculate the child against later educational failure. What we do have to do is to constantly reinforce, but at present we are, doing less for the under-fives.

Some authorities—at any rate before the recent cuts in public spending—envisioned tackling this problem by expanding the number of part-time nursery class places, running courses for childminders and encouraging childminders to take their charges to nursery schools or play groups. There are several reasons for believing that this policy is totally inadequate.

First, several surveys have shown that the most common form of care is not by childminders, but by husbands or relatives, who are often too exhausted or insufficiently motivated to take a child to and from a half-day nursery class. Second, until we know more about the quality of child-rearing by childminders and the effectiveness of courses in raising their standards, considering more of them and relying on their services, more of them and relying on their services, Third, such a policy offers nothing to the under-fives whose mothers are not working, and whose environment is often overcrowded and inadequate.

Finally, for many children from black or Asian families the usual nursery class regimen may be of limited value. A nursery class offers children the opportunity to mix with

other children, to detach themselves for a while from their mothers and to experiment freely with a wide variety of materials. This type of education works best if there is a back-up from a mother who during the rest of the day is busy explaining and talking to the child. At school there is little opportunity for the one-to-one dialogue which is the special need of children from large or overburdened families.

The provision of experiences for such children is not enough—what they need for intellectual growth is someone who will help them to understand and extract meaning from their experiences. This requires a good deal of individual interaction with an adult. Unless special plans are made, the children who need this interaction most are likely to receive it least.

There is a second reason why the ordinary nursery school regimen does not meet the needs of children from ethnic minorities, even if they come from a family which is not hard pressed. This is their special need for language teaching. Contrary to popular mythology, children do not readily pick up an adequate knowledge of English simply by mixing with English children.

This may happen in the case of an isolated child but not when a number of black or Asian children enter school together. Such children tend to stick together, and not to approach adults; yet language is best learnt from adults. Not only do young children have a limited vocabulary to teach to others, but the uses to which they put language at school are often limited. In a free-play group the teacher is not likely to spend long talking to any one child, especially an unrespon-

sive child. Unless some special attempt at language teaching is made, they may emerge from nursery school with little more English than when they started.

One approach to the language difficulty would be to take the concept of the multi-racial school seriously. Staff should be recruited who would teach and speak to the children in their native language or dialect, only gradually weaning them, perhaps in the infant school, to English.

The argument in favour of this policy is that the acquisition of a second language may best be delayed until the child has acquired the fundamental linguistic-cognitive structure in his first language. Alternatively, we need to develop techniques for helping the child to acquire a second language at the nursery stage. We don't know which of these strategies is the better and research is urgently needed.

Admittedly, we are always short of teacher-time, but good use could be made of volunteers. Secondary school children are often sent to help in playgroups, but the experience tends to be neither satisfying to them nor useful to others because they don't know what to do. If, however, they were given the responsibility of helping one or two children and trained in how to help them, the experience could be particularly useful.

Douglas Hubbard has carried out very successful programme along these lines in Derbyshire infant schools, with indigenous English children.

There may also be a pool of adult volunteers in some areas—for example, among women not working, and the retired—who after training could give considerable help in the schools. Finally, the children's parents can be enlisted in the educational process, and could give valuable help if the teacher explained her aims and methods.

Language work in nursery classes is however a partial contribution to the problems of the under-fives in ethnic minority groups. These children's development is dominated by poverty and poor housing and often by the effects of long hours of maternal employment, maternal fatigue and depression.

These are social problems, which require social solutions. It should also be recognised that they have educational implications. All the settings in which the child is reared from his birth are educational, in the sense that whether at home, with the childminder or on the street, it is both learning and being taught skills, knowledge, values, and attitudes. Often this education is inadequate or harmful.

If this point is accepted, then it follows that we have an obligation to provide services to help the family with child-rearing from infancy. It makes no sense for education departments to consider that they are providing for the educational needs of under-fives by setting up nursery classes, while ignoring the education of the under-threes and of children whose mothers work long hours.

To believe that education is something which only goes on within the school premises is to abdicate responsibility for the great bulk of the young child's experiences. In the long run this doesn't pay off, as we see when they arrive at school. For this reason we should surely be working for a unified department, responsible for supporting the family with both care and education services. For the children of working mothers, good quality day-care which is truly educational is needed. There are strong arguments for giving priority to the provision of such services in areas of high immigrant concentration.

With respect to costs, two points must be made: should not part of the contribution which these young children are making to the economy be paid back in services to them? And is it not true that we decided as a society that the care and happiness of our young children is a major priority?

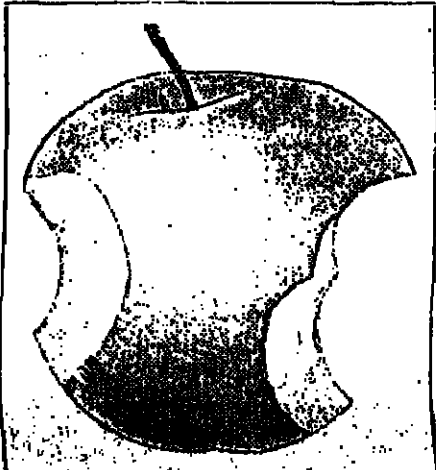
Barbara Tizard is Dr Barnardo's Senior Research Fellow, Institute of Education, London.

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For our feature series on the common curriculum, Maurice Holt suggests some difficulties involved in organising a timetable which provides real choice for all students; and Patrick Eavis shows how one secondary school attempts to keep the options open as long as possible



What are the real options?

Maurice Holt

Choosing what suits you best is enjoyable and satisfying at any age. In a consumer-orientated, industrial society, we can have lots of fun doing it, provided those alternatives, until for our purpose can easily be disposed of first. Any one of 20 kinds of cat food will do for our cats. But will any one of 10 subjects in an option column do for our fourth-year child in a comprehensive? Are they all equally fit for the purpose of educating him?

He's chosen metalwork because he likes the teacher, and the head of lower school said there'd be room for him. Until last year he used to enjoy science, and now the only science subject he's doing is something called human biology. The school sent his parents a complicated booklet about the options before Christmas last year, and they tried to see as many staff as possible at the parents' evening, including the careers man. But some of the choices were full, or only suitable for those the school said could get O-level. In the end Gary found out what his friends were doing and he seemed quite happy. And after all he is still doing English and maths, and he likes the school, so it will probably be all right.

There is evidence, however, that these multiple-option schemes are not "all right". The recent survey by the National Foundation for Educational Research, *A Matter of Choice*, found that "around 40 per cent of fourth-formers were either dissatisfied with or indifferent towards their elected subjects; there were marked differences in satisfaction between pupils of different abilities". The suited children tended to have poorer attendance records... some 40 per cent were being taught in groups which did not correspond to their capabilities for two or more subjects".

Incredibly, this kind of option system for the 14 to 16 stage has just been endorsed by the Schools Council's working paper 53 on the whole curriculum. This shows the privilege of a balanced curriculum for pupils up to 13, and for "pupils contemplating a

degree of choice in the sixth form". Balance for 14 to 16-year-olds will depend on how lucky they are with their school's planning and teaching courses and in the degree of coordination which is established between them. Whatever that means.

How have most comprehensives got lumbered with these complex option schemes? They are the chief source of timetable inflexibility; trying to make educational sense of them leads to complicated restrictions; they absorb a lot of guidance time; and they are, like all extrinsic choice schemes, costly to staff. The staffing enrichment necessary to run them inevitably comes from pinching in the 11 to 13-year-olds, with classes of 30 or more; the years where learning attitudes are formed and tomorrow's seed sown. It's an awful lot of trouble to go to, and the final irony is that, in spite of the pride each school takes in its own scheme, the choice of subject-patterns taken by fourth and fifth-year students is more remarkable for its similarities than its differences.

The option system has grown up as a makeshift response to the uncertainty about the educational purpose of the comprehensive school, which uneasily combines two separate curriculum styles: the grammar school, reinforced by a coercive, hierarchical management; and the topic-centred approach of the modern school, backed by intuitive decision making. One seeks pupil success (with little regard, incidentally, to curriculum balance) in what it identifies as academic subjects; the other just as confidently confuses instrumental, outward-looking courses with talk of personal development.

Both approaches, however, have class teaching in common. In taking them over, the comprehensive school has adapted them to the whole ability range by the essentially class-teaching-based devices of ability sets and subject options. We accept the difficulties created by the opposing polarities of the

two curriculum styles because option choices save our conscience by seeming to blur distinction. In any case, isn't the comprehensive school all about meeting individual needs? So the more subjects we offer, the better?

We come, as we must, to ask ourselves just what the comprehensive school is all about. Answering that means making value-judgements. The turgid compromise of working paper 53, despite its organization-man-grams and gratuitous classifications, is everywhere and nowhere. The judgement must be made by each individual school, analysing the interactions it has with all aspects of its cultural environment: its teachers, its social milieu and expectations, its traditions, its regulating authorities. They will inform and modify the way in which curriculum implements its own view of what an educated person, so that a selection from the culture may be made and each initiated into it.

In a democracy there seems much virtue in the classical concept of a liberal education, leading pupils towards autonomy—the power to make meaningful personal choices—by a general education which recognizes the distinctive modes of consciousness and experience. If the intellectual and emotional well-being of our pupils depends on bringing the world of mathematical, scientific, religious, moral and aesthetic understanding to an understanding of themselves and their relationships with others, a comprehensive school charged with compulsorily educating all its pupils to 16 would be failing in its duty if it did not attempt to offer such a programme to each of them.

This means seeing the five secondary years of schooling as a continuum concerned centrally with a balanced general education. Certainly, but not exclusively: society's certain instrumental expectations of schools (access to a foreign language, etc.)

preparation for leisure opportunities through physical activities. Schools must also allow pupils to acquire certain personal and vocational skills if they wish, notably in business studies and individual art and craft subjects. These needs can be met in general by two sets of options in the fourth and fifth years, taking up roughly only 20 per cent of curriculum time.

Getting to this point in the argument will be the result of the professional initiative of head and staff. They will use the work of philosophers of education in identifying knowledge domains, and will negotiate strategies in the light of available resources, political constraints and community factors. Negotiation, though, is not a matter of equally-weighted alternatives. The underpinning of the process, which must be the school's responsibility, is the recognition that some choices are better than others.

This process is not easy, but this next step is certainly harder. Now the ground-plan of intentions, criteria and expected outcomes must be implemented and turned into an organization and a timetable.

Each school's solution will be different, but some elements will be common. A variety of learning approaches will be needed, with both individual and group work. In mathematics, for example, if each student is to obtain mastery of an idea or technique, the system must be supple enough to allow some to take longer, while others move on to more advanced work spiralling round the same idea.

The resources for learning will extend beyond chalk and textbooks: staff will need allow room in each lesson to structure work patterns in a variety of ways. Periods of at least an hour are likely. Some resources and pedagogical equipment will be needed, though not necessarily the centralized, Aladdin's cave sometimes advocated, which can only complement detailed and careful curriculum planning based on ideas and

hopes, on cabbages and kings rather than packages and things. The latter matter, but they don't come first.

In history and the humanities, on the other hand, there will be a place for discussion to which all can contribute. Since our resources must be as accessible to students as possible, forming ability sets or bands seems pointless, useful only if one assumes students can be wrapped up in homogeneous groups to get the same collective treatment. This separatist approach runs counter to that of initiating all pupils into a basic nexus of knowledge and understanding by recognizing the best ways in which they can each learn.

Individualized learning is not the simple answer, either. A much more subtle mix is needed, starting with the relationship between teacher and learner. Teachers are in authority, because they know a bit more about aspects of our culture than students.

Teachers' decisions will be shared, while each enjoys considerable autonomy. Their life in assessing course work, constructing syllabi, selecting materials and devising learning systems will be more demanding, more complex. But our experience shows it is not without its satisfactions. Checking on the progress of each student becomes a necessity, and the quality between academic and pastoral work will never seem false.

Another result will be interrelated work

between subjects, possibly aided by a faculty structure. In science, for example, there is much to be said for developing a genuinely integrated approach based on concepts like the transfer of energy. The aim, after all, is to promote scientific understanding. Rigid divisions into physics, chemistry and biology may not be particularly helpful. (They certainly play havoc with traditional option schemes; their conflict with languages options is the prime cause of the premature specialization still rife in our schools.) While an association between English, history and geography is profitable in realizing several common aims, the right word is interrelation, rather than integration.

Take for example urbanization, which is a main area of work in our fifth-year humanities. Each group of specialists can profit from looking at it in different ways. There are the origins and effects of the Industrial Revolution; the validity of models for urban settlement; the response of the artist to changing influences; and man's responsibility in the future for urban and regional planning. Furthermore, the needs of the whole ability range can be met. One student can investigate the growth of canal systems while another studies the social effects of new forms of transport.

Both are being initiated in ways the teacher has established from discussions with

the humanities faculty and in accordance with the school's broad strategies. They will penetrate to different depths, but neither will be denied an encounter with an important topic. No streaming or setting is needed, but a parallel Mode 3 O level operation will be essential with, in our case, half the marks going on course work. In subjects like mathematics and science, an element of setting between O level and CSE by self-selection may be needed. Generally this can be left until the fifth year.

We find no signs of alienation because of this. Our pupils receive a coherent set of signals about the hopes we share for all of them because of the team-taught, non-streamed faculty structure, reinforced by year-tutors and the weekly meetings of the school forums. They are introduced to the idea of choice from the beginning: choice not between ill-understood subjects, based on premature assessments of possible jobs or careers, but between different ways of approaching a new set of ideas, worked out on the spot with the staff concerned, and reflecting the changing talents and aptitudes of the student through week, term and year. This makes sense of choice, and we could not do without it.

Sheredes School has pursued these lines since its establishment with first-year pupils in 1969. Now it is fully developed to the second-year sixth, there is no evidence that pupils or parents (it is a parental-choice area) dislike non-streamed general education. In fact, the results show an extensive engagement with the content of the curriculum across the ability range. We have used Schools Council and other project materials where appropriate, but always modified to meet our own requirements. In schools as in other choice-oriented environments, our own brands are the best value.

Maurice Holt is headmaster of Sheredes School, Huddersdon, Hertfordshire.

Getting the balance right

Patrick Eavis

When I see the difficulties that face us in the classroom, I wonder about the relevance of the perpetual discussion on education. Although at Manor Park we are already broadening our curriculum along the line now suggested by the Schools Council working paper on the whole curriculum, curriculum development *per se* is only part of the answer to the malaise in secondary schools.

A large number of pupils are bored out of their minds. They cannot see the point of much of what we expect them to do, it is true, but the origins of absenteeism, poor motivation and disorder that are the ever-present testimonies to our failure cannot be explained by the content of the curriculum alone. A discussion of the common curriculum and its close relative, mixed ability teaching, is not the only, and may not even be the most pressing, need at the moment. The malaise may be less affected by the resolution of this debate than many think. Desperate measures, such as more examinations and more vocational or "relevant" courses, are unlikely to be successful.

While the average national attainment is around grade 4 CSE, most pupils will have to accept that education cannot be a means to an end in any career. Whereas the more able can swallow any curriculum (common, mixed, selective, streamed, or however it is served), in the hope of greater things to come, for most there is no such hope. Many swallow it reluctantly or not at all. So even when the question surrounding the common curriculum, which many see as the logical extension of the comprehensive ideal, is solved, the basic difficulty of switching on the interests of most of our pupils remains.

And the solution to that, first of all, depends on the achievement of far more pedestrian methodological aims.

Predominant among these is the need to maintain sufficient calm and order in schools to give anything a chance to operate. We need to be able to support the teacher, particularly the inexperienced, in this and in other ways, too. Many teachers have lost their sense of direction, not because they are unsure of curriculum aims, but because the difficulties of control without regression and of the organization of the resources needed to teach wider ability ranges are too great. In such a situation the unrest inherent in the lives of so many of our pupils is compounded.

Perhaps we have set our sights too low, but I am sure that we were right to set out by tackling difficulties such as these at Manor Park, and that this has contributed to the improvement in the lower school that staff are beginning to report. For the 11 to 13-year-olds we are trying to reduce the number of teachers teaching each child to provide greater stability; to cut down on the clamour of period changing every 35 minutes that only adds to the phreneticism of their daily lives. In this way, we have tried to build a bridge between primary and secondary school.

Throughout the school we are pushing for a commonly accepted code of behaviour and trying to inculcate a sense of joint responsibility. To get greater involvement and interest from our pupils we are trying to improve our teaching, working from a fairly traditional base in terms of content but being fairly adventurous in method. Team teaching

is helping us to do this. With mixed ability teaching it is no longer feasible to prepare the lesson in the corridor on the way to the classroom. It requires commitment and preparation. Working in a team allows teachers to produce good resources of all kinds collectively. It also allows them to draw on each other's special expertise and, if a teacher is committed, supported by and supporting the others.

We try to get pupils out of school as much as possible and to make imaginative use of students. To a large extent, we have broken down the traditional notion of teaching periods and may have as many as 12 subjects at one time working as a team, producing teaching materials and trying them out on pupils.

As to what we teach, it does not matter much what it is as long as we are stretching pupils; as long as they are enjoying it and improving their basic skills; and as long as we are keeping as many possibilities open as long as possible by giving them the chance to learn something from all our different forms of knowledge.

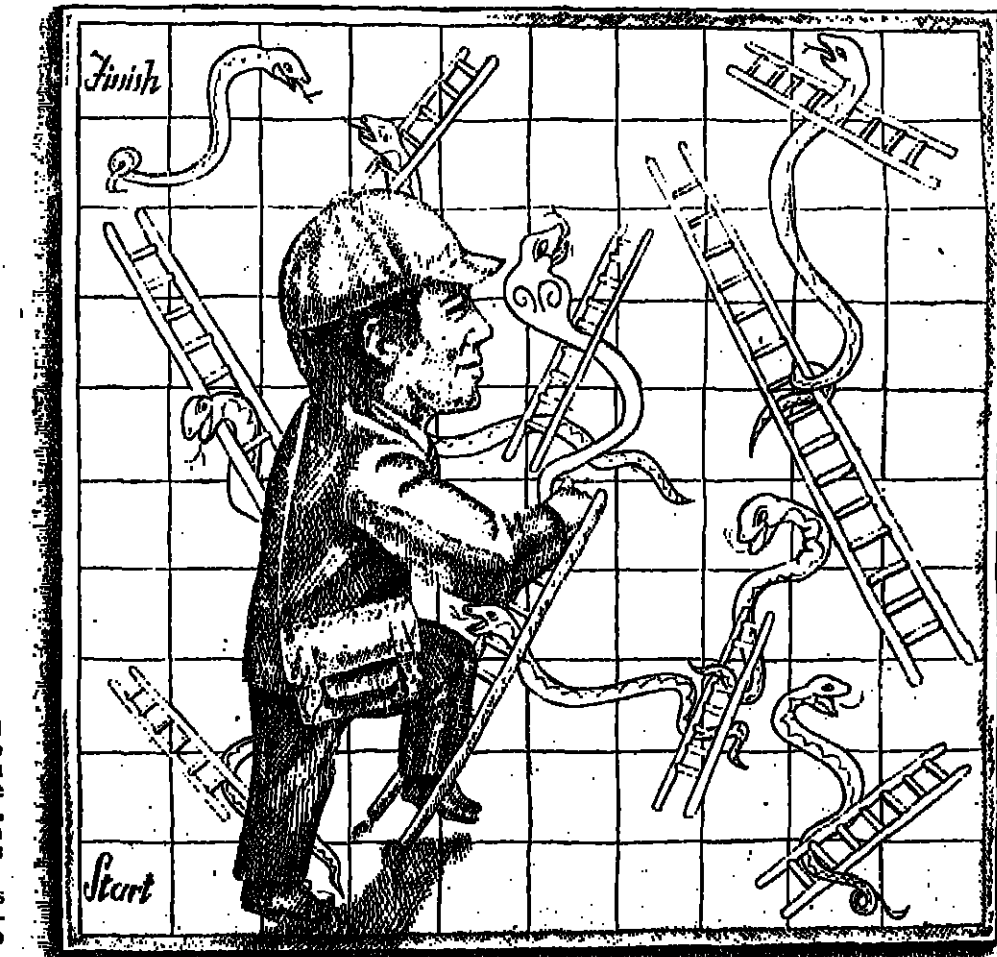
But there are no absolutes in educational theory or practice. As the Schools Council working paper makes clear, development and every centre of educational development and every school has to work out its own solution. At Manor Park we have a unique set of constraints in our environment, pupils, staff, buildings, local authority and examination

curriculum for 13 to 16 ought to mean all pupils studying exactly the same topics. So while for 11 to 13 we have a broad common curriculum, with pupils covering the same topics but some at greater depth than others, for 13 to 16 we have a balanced curriculum, a variety of activities from which all pupils make limited choices (see table).

The Schools Council working paper argues that fourth and fifth years should have balance and choice in their curriculum. The two are not always compatible, and most adolescents are not too easily convinced of the merits of a balanced curriculum. Our scheme does an attempt to compromise between the two. All pupils must choose one course from each of the broad subject categories of English, maths, science and creative arts. In humanities they have to choose two courses from history, geography, economics and RE.

Everyone has to do some mathematics, physics, chemistry, computer with maths, creative, or our Mode 3 maths creatively, even the most academic, though not all pupils agree with this. At present we do not offer enough alternatives within each broad category, but there is one line of development we hope for. The cheap choice between art, metalwork, woodwork, pottery, graphics, vehicle technology, home economics, and needlework.

Two further option groups offer the choice of two languages, a second or third science, or two commercial subjects. In some subjects the options may be fairly directive, in the sciences, physics, chemistry or biology, for instance, pupils may be steered into the



make the sort of progress primary schools have made in the past 20 years, and particularly since the abolition of the 11-plus.

The important thing is to keep opportunities open to every pupil. To do less is to sell them short. This means teaching them something of what we know and enjoy. If socialization is all that schools are about, we might as well close them down and turn them over to youth clubs.

Patrick Eavis is headmaster of Manor Park School, Newcastle-upon-Tyne.

| Years 1 to 3 Common curriculum Common syllabus for all in: | |
|--|-----------------------------|
| French | |
| Mathematics | |
| Combined science | |
| Humanities (history, geography, English, RE) | |
| Drama | |
| Music | |
| Creative arts (half a term each of cookery, woodwork, metalwork, two- and three-dimensional art, etc.) | |
| Years 4 and 5 Balanced curriculum | |
| All choose one course from broad categories: | Plus two more options from: |
| English | Two languages |
| Mathematics | A second or third science |
| Science | A second or third art |
| Humanities | Typing |
| Creative arts | Accounting |
| Guidance | Commerce |

A lot of learning that takes place outside the classroom occurs in the games children play. Pat Palmer shows how one primary school made use of this traditional folk art.



Rhyme, rhythm and song

Playground duty is nobody's idea of fun. Yet it is probably the only time we can dig for the half-buried treasure of children's traditional culture. Sometimes, for physical, educational, or socio-economic reasons, the playground is not a suitable environment for playing traditional games. And, to the less observant or sceptical, children's culture has gone the way of most other folk culture. However, if we look more carefully, small games may be seen playing as children have played for years, using rhymes, songs and dances to enhance the games.

On cold mornings girls in twos or, if there are enough players, in small circles, do one of their favourite clapping rhymes, "Who stole the cookie from the baker's shop?" The intricate pattern of claps, underarm and overarm, accompanies the patter, which is a satisfying mixture of solo and group voices with quick wit and counting, requiring a fair degree of coordination. They probably know at least a dozen of these "claps".

If we show interest they will probably demonstrate singing games like "A sailor went to sea" or "Going to the countryside". During my playground duties, I asked whether they knew "Monday night, down the lane, Tuesday night, back again", a singing game I'd noticed at another school some six miles away. When they answered "no", I realised that area differences in games might be an interesting piece of work in a school environmental studies project. I suggested a collection of games to other schools.

Most heads were sceptical. "What was the educational value?" "Children no longer play traditional games." The games they play have been taught to them by infant schools or by their guide and brownie leaders. The thought of a brown owl teaching about the signorita with curlers in her hair, going "humbercha" with suitable hip movements in one game, caused me some amusement.

Four schools finally decided to help in the collection of material under the suggested headings: claps, dips, singing dances, circle games, line games, ball games and skipping games (particularly those using rhymes) and others.

The main aspects which interested me were the music, the language, the movement and dance. I sent the list of the games including these features played at our school and asked teachers at the contributing schools to mark the ones they had observed and to add other titles. I suggested there should be no interference with the oral transmission, and so texts were not written down.

A date for a festival/party at which games could be demonstrated and exchanged was fixed. After examination of the material, I compiled a programme, which was not printed

or circulated, lest the temptation to rehearse was too great. As 59 titles were submitted, it was a difficult task to choose items to be performed. I decided on a mixture of those known in several schools, or in all schools, and those known in only one school, so that critical observation and discovery could be encouraged.

During the collection of material children came and showed me all kinds of dances and songs, including rather depressing examples learnt at private formal dancing classes. Eventually many realised that our collection was to be of their own traditional songs. Few of the old classics were collected, with the exception of "There comes a gipsy riding", "The big ship sails" and some skipping games with songs and chants. However, new children's favourites are entering, and they are undoubtedly traditional in form and content.

Two half-hour sessions of practice with the junior choir were used to help compile and demonstrate games. Helpers were chosen by the time-honoured children's method of dipping. I prepared a chart showing the complete list of games, with contributing schools represented in different coloured discs: on separate charts for each school were noted items that only individual schools knew. The lead of the art-department produced life-size paper cutout boys and girls, made by his own class, and these were mounted as a backdrop to the games.

Only two other schools were able to attend the festival. The visitors were allowed to run about the hall freely. They seemed delighted with the wall of paper children, and examined the map and charts with great interest. They were allowed five or 10 minutes to talk to one another and to feel in awe.

The programme started with the clapping game, "A sailor went to sea". As this was listed by all schools. In this first item area variation was noted, but this caused little disturbance in performance. However, in the second item there was so much variance that schools were encouraged to show and watch different variations. This happened quite frequently during the claps, dances, circle and line games that formed the first half of the programme. Some items, however, were demonstrated by two groups simultaneously.

When games or songs known only to one school were shown the other children watched with critical understanding and interest, just as would any expert audience watching performances in a style with which they were familiar. This was children's culture and they were in their own element. They applauded the skill and inventiveness, the humour and liveliness of songs and dances. One school, in particular, had a distinctive style of move-

ment known only in that area.

Little organisation was necessary. Schools were asked "Please show us..." and a leading singer or chanter always emerged—there was little shyness or reticence. The children were confident in their own culture. The time, however, was utterly inadequate. During the break for refreshments the visiting children said "Please, are we doing more games?"

The teachers marvelled at the children's material and performance: the skill and coordination, the inventiveness and humour, the love of language and the immense enthusiasm. Meanwhile in the playground the children continued their games. Circles and groups of girls clapping games attested to the success of the occasion.

Most of the boys played football. By the third year boys stop playing singing games. However, many second-year boys continue to join in occasionally, and they still enjoy watching the girls play.

When the programme resumed, skipping and ball games were shown. A diversity of skills and careful matching of language and movement was observed. Time quickly ran out. One school had to leave for a skittleball match. The children were reluctant to go and anxious to visit us again. It was impossible to choose a game that everyone knew to finish with. I decided to teach a simple French line game, so all could join in on equal terms. The long line twisted round the hall and corridor and the children sang at the tops of their voices. The festival had been successful and worth while.

It is difficult to record the enthusiasm as well as the variety and vivacity of the children's performance. A film would be a more suitable medium. We had made a tape-recording and taken colour photographs which cannot show the blend of singing or chanting, movement, mime and dance which is the children's art form.

This performance was as interesting and entertaining as other forms of traditional culture. As the early stages of our project showed, many teachers are unaware that under their noses a lively, ever-renewing folk art is still alive, that helps children to learn to understand and to grow up in the complex society that we have made. Through the ritual of their games they show respect for social conventions and responsibilities.

In our school, which is multi-racial, all the children assimilate the games and play them at some time in their school lives. Through the skills needed for the games they learn to understand and respect, particularly in small movements of hands and feet and legs. They also develop a most surprising memory for a large repertoire of chants, songs, and rhymes, aided mainly, one assumes, by the

strong rhythmic component which is reinforced by physical movement. The show developing skills in language which manipulate with obvious delight: meenie, macka, rucka... black bobbie... A sailor went to sea, sea, sea. To see what he could see.

Some of the singing games show a sense of humour and understanding which is sometimes surprising and at others reassuring. The dance of primary social roles and possibilities, as shown in "When Snow-baby" which traces the life-cycle of a girl from birth to death (and in some ways, after, it is touching but comforting), the wryness of humour in the references to the figures of the time, like the King and George, Best, shows the good sense and the recognition of the carter's role in the children's intrepid observation.

The fairness of the dip compared favourably with many strategies of choice, and teachers and other adults. The children avoided romanticizing children's culture. He did like anthropological references. He did like the scissor jumping used in "Cheeky Chinaman", the primitive language of strength or skill for tribal leadership, and the dangerous to speculate too widely on origins, as games are being changed and adapted to suit the needs of the present. That children of this age need some of the modern educational philosophy of practice emphasize individualism and the sense of the children's social reality.

Children also enjoy combining games, particularly with music or rhyme. The dance, mime and clap. When looking at the well-disciplined choir of young clappers, it is an effort to suppress the natural urge to respond to music. The children's response to music. The children's response to music. The children's response to music.

Children's singing games and dances have a strict form. The rhymes and songs are lively but do not preclude variety and invention throughout the repertoire. The clarity of form in their traditional games they also favour it in creative school?

Pat Palmer teaches in the junior department of King's Heath Primary School, Birmingham.

Justice for the judges?

Lord Hailsham reviews two new books on crime and society in the eighteenth century

Albion's Fatal Tree. By Douglas Hay, Peter Linebaugh and E. P. Thompson. £7.50. 0 7139 0975 7

Whigs and Hunters. By E. P. Thompson. £6.50. 0 7139 0991 9. Allen Lane

It seems to have become a fashion to decry the eighteenth century. It is easy enough to do this if we apply to the doings of our ancestors the ideologies or standards of either the nineteenth or twentieth centuries. Indeed there is much for which no excuse can be made or offered. There can be no defence of the brutalities after Galileo, the savage evictions accompanying the Highland clearances, the uncompensated loss of customary rights in the English enclosures, the condition of the poor before the advent of social security, the lawlessness in the absence of an organized police force or an incorrupt and centrally controlled civil service, the savage penal code, the sleazy subculture revealed in *The Beggar's Opera* or Boswell's *Early Diaries*, the scandal disclosed by Jonathan Wild's conviction, the hypocrisy and smugness of members of the so-called Venetian oligarchy or their political corruption.

One can go on forever, and equally pointlessly. One may also admit as candidly that much of this *vie scandaleuse* can make very pleasant and interesting reading for a wet afternoon. But how far is it really history as history deserves to be written for an educated public?

For there is another side to the coin. The century began with a Britain quarrelsome, divided, ruled by an unacceptable despotism and suffering from a groggy curfew. Until Marlborough's victories, Britain was even the pensioner of France. Even if we prolong the century till 1815, or better still, to the dissolution of the last unreformed Parliament, we ended up a confident, basically united country, which, although it now faced new problems, alone of all the European powers had the social solidarity and military knowhow to withstand and defeat revolutionary and Napoleonic France, and had protected itself with a legal system which, for all its faults and limitations, proved capable of survival throughout the North American subcontinent and was in process of being transplanted to India and Australia.

Above all, and with all the weaknesses in her social system, Britain had become possessed of a constitutional and political maturity and economic strength which proved sufficient, both then and afterwards, to absorb without civil war the strains and stresses of the Industrial Revolution and the coming reforms of the nineteenth century. No assessment of the eighteenth century can be called fair which does not candidly acknowledge these achievements and the contrast they make with those of any governing class on the Continent.

These two books require to be reviewed together since the second, E. P. Thompson's *Whigs and Hunters*, was originally designed as an extra chapter for the first, the composite *Albion's Fatal Tree*. Both are the offspring of the Centre for the Study of Social History at the University of Warwick. Both are, to quote the authors centrally concerned with the law and crime in the eighteenth century's definition of crime. Both are concerned with England and English law: to the exclusion of Scotland.

Albion's Fatal Tree is written round the story of the Tyburn Riots, the smugglers in Sussex, Kent and Hampshire, the abominable practice of wrecking as practised in coastal districts, particularly in the West and South, the art of poaching in

Cannock Chase, and the practice of writing anonymous and blackmailing letters in support of social grievance which, did the authors but know, persists fairly vigorously up to the present.

Whigs and Hunters revolves round the history of the so-called "Black Act" of 1723, introduced at first to deal with the gangs of disguised and armed poachers who practised in and around Windsor Forest and Hampshire and pillaged both Royal and private parks, fishponds and forests. Though I would have welcomed chapters on the Gordon Riots and on Luddism and the Enclosures at or after the close of the century, both books are worth reading and both present new and interesting facts. Neither gives an acceptably balanced picture either of the jurisprudence or ideology of the period.

From the lawyer's point of view, the eighteenth century may be said to commence with the Chief Justiceship of Holt and to last until the end of Lyndhurst's first period as Lord Chancellor at the close of 1830. Clearly, of course, the law of that era was based on the social system of the day. Civil law was largely concerned with property, though the law of contract was fast developing. The penal code was savage, and one of the strange achievements of the eighteenth-century Parliaments was to add a whole clutch of new offences to the criminal law, barbed by a series of excessive punishments and repressive penal procedures. With non-custodial penal treatment a thing of the future, and prisons nothing better than insanitary cages largely containing prisoners awaiting trial and, unable to pay civil debts or fines, with prosecutions largely in the hands of private individuals and informers, no organized police force, and witnesses often consisting of accomplices bribed to turn King's evidence, and with soldiers the only means of keeping order, Parliament and lawyers were left to struggle as best they could with the

melancholy alternative punishments of the gallows, the pillory and transportation, with fines for those who could pay them and imprisonment for those who could not.

In short, they often had to choose between the brutalizing and the ineffective. In the outcome they did much to mitigate the harshness of the scene by personal humanity, the use of the prerogative and rules designed for the protection of an unrepresented accused.

In truth and in fact the age was one of steady progress even on the criminal side. Despite the growing number of offences, the theoretical savagery of the code, and the constant increase in the population, actual executions declined to about a quarter of the level at which they had stood a century before. Moreover, this was the age which first gave us many aspects of the modern English criminal trial as we now know it, the burden of proof resting firmly on the Crown, the exclusion of hearsay evidence, the requirement for corroboration in the case of accomplices turned King's evidence, the necessity for guilty intention as an essential ingredient in crime, and the exclusion of extorted confessions, to name only a few examples. It was the age of the growing maturity of Equity under Hardwicke and Eldon, and of commercial law under Mansfield (in spite of the failure of his brave attempt to get rid of the doctrine of consideration). It was the age when international and maritime law began to flourish under Stowell, and when Blackstone prematurely introduced the academic study of law to somnolent eighteenth-century Oxford.

The judges (whose private lives were rather more open to reproach than would be acceptable today) were far more humane and much more just than their predecessors of Stuart times, and, so far as we know, apart from the Macclesfield scandal, almost all totally incorrupt. They were, of course, mainly appointed by politicians, often as the reward for

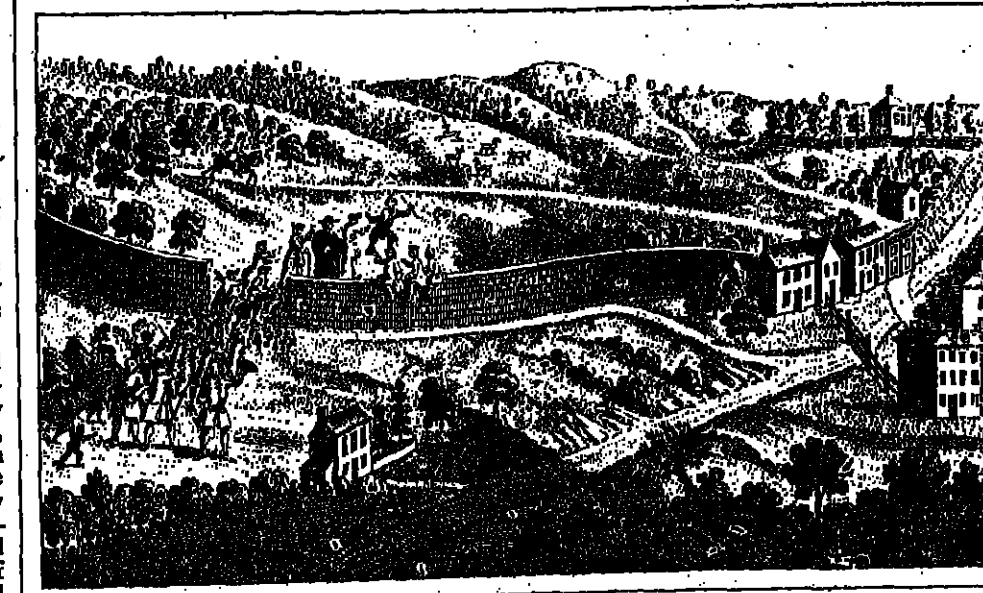
political services, and much more susceptible than their successors to a political approach, or even political interference. But they were infinitely less vulnerable to this than their predecessors, and, by and large, they applied the law impartially as it was then understood. I doubt whether Erskine could have obtained his famous acquittals under Jeffreys, Scroggins or Scroggs or maintained his courageous independence of the Bench. Though there was the odd hanging judge, like Page, he was exceptional and only a pale reflexion of the Stuart judges. Against him must be set Romilly (though he was not a judge), Foster, and, pace Mr Thompson, Holt, Hardwicke and Mansfield. Viewed as a body, they left the tradition of the rule of law firmly established where they found it precarious, primitive and uncertain. And, in the wings, stood Jeremy Bentham, barrister of Lincoln's Inn, the first real swallow in the summer of law reform.

I would not have mentioned any of this if the authors had simply stuck to their last and gone into the interesting details of the research they have carried out. Unfortunately, they lay claim in their preface to a concern with law both as ideology and as actuality and the authors stand to be judged not merely by the factual accuracy of the incidents their researches have brought to light, but by the breadth, depth and balance of their appreciation of the law and society as it really stood.

By this standard, they must be judged to fail by far the worst offender in this respect is Mr Thompson himself. His contemptuous treatment of Hardwicke and Mansfield is really inexcusably one-sided and unjust, so much so that even the irrepressible Lord Campbell shines like a beacon light in comparison. These two judges were among the greatest lawyers of their day in this or any other European country. They deserve something better than to be treated solely as if their contribution to the jurisprudence of their age was altogether negligible and confined to the criminal law, or to be made the subject of cheap sneers as if their decisions, if not actually corrupt, were mainly inspired by their class attitudes.

The truth of course is that, even compared with our own, the eighteenth century was a brutal and corrupt age, but the tendency was towards enlightenment, financial integrity and the purity and integrity of moral standards.

This the authors fail to appreciate, and the reason appears to be that they have chosen to blinker their vision by a Marxist ideology, into seeing only part of the truth. The actuality and ideology of law, with which they claim to be centrally concerned, cannot be studied by a concentration on the gallows and social grievances alone, or even on crime generally. Incidentally, and speaking personally, I could have done without yet another reproduction of Hogarth's brilliant caricature of the Court of Common Pleas (familiar to all readers of *Private Eye*) and, if he was under instruction to reproduce it in colour on the jacket, the artist could be recommended to make a visit to Ede and Ravenscroft in Chancery Lane, where he would discover that the colour of ermine as it appears on the judges' cuffs, cape and mantle is white and neither brown nor scarlet.



Parishioners, led by their vicar, beat the bounds of their parish and assert their right of way into Richmond Park by breaking down the wall.

HOMAGE TO ORWELL

Nicolas Walter

The Road to "1984". By William Steinhoff. Weidenfeld & Nicolson. £6.50. 0 297 76981 2.

The critical industries which spring up around certain writers make the appearance of original work almost impossible. If it isn't driven off the market by the academic machine, it is stifled by literary snobism. Thus it has become increasingly difficult to write anything fresh about George Orwell, who is a prime victim. So much has already been written about him—far more than he ever wrote himself—that anything new seems either obvious or absurd. William Steinhoff is mainly concerned with the obvious; his particular contribution to the absurd is the thesis that Orwell's last novel, *Nineteen Eighty-Four*, was the culmination of his whole career—or alternatively that his whole career was a preparation for *Nineteen Eighty-Four*. "There is scarcely anything Orwell wrote that is not assimilated into 1984."

This is a good example of industrial criticism. The hundreds of various writings—letters, diaries, sketches, reviews, reports, essays and novels—which Orwell produced over a period of more than 20 years are all seen as individual items in a single continuous process inevitably reaching its climax in 1949; every little nut and bolt in every verbal mechanism falls into its proper place on the assembly line and is made part of a monstrous machine. The trouble is that the splendid schematic structure which results from such an interpretation collapses when it is taken out into the open air from the workshop; the machine comes to pieces as soon as anyone tries to use it. The attempt to discuss a writer in this teleological—almost eschatological—way ignores the way people actually live and write: actually work. Literature, like all human activity, is far more accidental and contingent than professional critics suppose. Above all, just as a work of art is not completed, but only abandoned—in Valéry's phrase—so an artist's career is not concluded but only interrupted.

This is especially true of Orwell. He wrote hard for nearly 20 years before he thought of *Nineteen Eighty-Four*. If he had died of tuberculosis two years before 1950, he would have finished it, and this culmination of his career would have seemed to be *Animal Farm*. In disagreeing with Deutscher's thesis that *Nineteen Eighty-Four* is largely derived from Zamyatin's *We*, he is surely wrong in agreeing with Orwell's thesis that *We* is a satire on industrial society in general rather than Bolshevik society in particular. Zamyatin wrote it under Lenin rather than Stalin, but plenty of people saw the totalitarian implications of Leninism. Zamyatin himself wrote satires on the Bolshevik regime from 1918 onwards and was even briefly arrested in 1919 and again in 1922. *We* was refused publication as soon as it was finished in 1921; Professor Steinhoff's quotation of Zamyatin's reference to Taylor, the American theorist of industrial efficiency, actually disproves his own case, for Lenin was well known as an enthusiastic admirer of Taylorism.

Professor Steinhoff mentions the theory that Orwell was once a Communist, or at least a fellow-traveller only to say that "there is no evidence to support this belief". This is not quite true, for his earliest journalism—written in Paris in 1928-29—not only appeared in Communist front papers but also followed a recognizable pop-Marxist line on censorship, poverty and imperialism; as Peter Sedgwick pointed out six years ago, it would be wrong to take Orwell's political reminiscences too literally. I think this point should also be made against Professor Steinhoff's overnight conversion from anti-Marxism to a pro-war position in 1939; his relationship with pacifism was more complicated and contradictory than Professor Steinhoff allows, and his pacifist phase of 1938-39 was more than a momentary flight, or an aberration.

In the end *The Road to "1984"* suffers from the same defects which affect virtually all Orwell criticism. It would be unfortunate to read it before reading *Nineteen Eighty-Four*, and it is unnecessary to read it after reading *Nineteen Eighty-Four*. Orwell is so much better than his commentators, good literary criticism generally much better than even good criticism, that Professor Steinhoff's particular contribution will simply disappear in the industrial haze; and that haze is moved away as soon as one opens Orwell's own first page: "It was a bright cold day in April, and the clocks were striking thirteen."

Among this week's contributors:

David Reibel is senior lecturer in the department of language, York University.

Nicolas Walter is editor of *The New Humanist*.

F. R. H. du Boulay is Professor of Medieval History at Bedford College, London University.

Donald MacDonald is a lecturer in the department of geography at Jordanhill College of Education, Glasgow.

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Petham Books

30 Books/Literature/Paperbacks

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The Land Beyond. By Maria Gripe. Blackie £2.95. 0 200 72336 7.
Julia's House. By Maria Gripe. Chatto and Windus £2.25. 0 7011 5064 5.

Maria Gripe's books now come with a wrapper proclaiming "By the winner of the Hans Christian Andersen award 1974", an award given for a body of work, but coinciding with the publication in Britain of *The Glassblower's Children*, a compelling tale which combined the simplicity of folkloric structure and language with the nightmare atmosphere of a Gothic novel.

Followers of Maria Gripe's writing through the Hugo and Josephine trilogy, a convincing reconstruction of school and family life seen from the young child's view. *The Night Daddy*, simultaneous diaries of Julia and her male sister-in-law, and *The Glassblower's Children* will know that she works in no one genre, in no one style. We cannot say "another Maria Gripe" and know resist the council's redemptive plans. As background to Julia's fight to save the house, scenes at school and in the streets are woven with convincing characters. The weaving from the form of *The Night Daddy*, which was a treacherous form used by the first necessity is two first accomplished, the writer does not establish this. The voice we hear is that of a liberal Maria Gripe, who manages to convince us of the strength of Peter and his relationship. Although the characters are sharp and long after the story has been reinforced by Harold Grogan's illustrations.

The Land Beyond, published in Sweden in 1967, is a classic example of authorial self-indulgence. It consists of one story told twice: first in some 50 pages, then in 150. An explorer discovers a new land and tries to persuade two kings, one old and one young, of its existence. In the first version "as it was told to me as a child" we are left to decide whether the land was real or mythical, whether it existed in the past or whether it was a possibility of interpretation to another gives added

PAPERBACKS

REFLECTING REALITY

The Great Crash 1929. 70p. 0 1402 0540 3. Economics, Finance and Laughter. 19p. 0 1402 0540 4. *Public Purpose.* 55p. 1890 4. By J. K. Galbraith. Pelican.

Reading Galbraith reminds us how rare a man he is as an economist, writer, and wit. He writes intelligently, intelligently and wittily. *The Great Crash* is a marvellous bit of economic history, an astonishing story of the greed and folly which can overtake men—not excluding the very highest in the land. *Economics and Laughter* is a delightful collection of essays covering contemporary economic issues, American foreign policy and personal reminiscences.

Economics and the Public Purpose is an important book; don't worry if you never got around to *The Affluent Society* or *The New Industrial State*, for here Galbraith covers all they had to say in a more succinct and up-to-date manner, and deals, as they did not, with the whole economic system of the modern industrial capitalist society. The earlier volumes discussed that part of the economy which Galbraith

calls "the planning system", the existence of which the liberal neo-classical economists of the world of the 1930s, their relations to the community and the way their decisions in the market place also looks at "the market place"—the world of farming and the arts; in the United States this comprises about one half of the economy, and this half does not correspond to the market economy. The market economy, the world of the 1930s, has led to the development of a new type of employment, and to the development of a new type of employment, and to the development of a new type of employment.

Principles of Classroom Learning and Perception RICHARD J. MUELLER Designed specifically for teachers in training, this introductory text presents the basic psychological principles governing learning, perception, motivation and the retention of knowledge. Theories concerning the nature of intelligence and the relationship between creativity and intelligence are discussed in detail as well as the dynamics of social adjustment.

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Unwin Education Books No. 22

GEORGE ALLEN & UNWIN

REGIONAL OVERLAP

Donald MacDonald

North America. By J. H. Paterson. Oxford University Press. £5.95, paperback £3.25. 0 19 913175 9.

Authors, facing adverse criticism, sometimes ask, quite naturally, "Well, what are the critic's qualifications? Do I have to heed someone less well informed than myself?" Praise by contrast, is virtually always welcome, regardless of its source. Perhaps, then, John Paterson can accept an encomiastic word from one who admits to being less well acquainted with the regional details of North America than the Leicester professor. As an undergraduate, I found the early 1960s editions of this work immensely useful. The third edition was a handy resource in college teaching, and the fourth in college lecturing.

Literary standards have long exercised Professor Paterson, and his work remains an object lesson in fluency. In this fifth edition, the supporting visuals improve on the fourth edition, which marked the change to a larger format, photographically supported with photographs. The text is the reliable mixture, almost as before. Apart from updated statistics and references to recent legislation, the alterations include new chapters on the West and on regionalization. Curiously, the use of administrative divisions as a convenient regional framework is rather under-played in this new chapter. After all, many of the regions later discussed are also administrative divisions. The regional overlap, each regional chapter could do with a clearly defined map, to indicate just what the chapter covers. Even so, the book is excellent value for what passes these days as money.

STARK FACTS

Bryan Waites

Appartheid Quiz. Zimbabwe Quiz. International Defence and Aid Fund. 141 Negate Street. London EC1A 7AP. 20p each inc. postage.

Das in school textbooks and other educational materials has been a growing concern for a number of years and, indeed, UNESCO has called together experts to investigate bias in history and geography books. Some work, too, has been done on textbooks in other areas such as the USSR, eastern Europe and China which would also reveal a great deal of hypocrisy and tyranny there.

Nevertheless, each booklet is an eye-opener merely by the statement of stark facts given in answer to a long series of questions; for example, "No land was allocated to Coloured or Indian people" and "The decision to become a Republic was taken by referendum in which only whites took part. More might be given and why the language of the booklets is suitable for sixth-form but certain political expressions make it rather complicated for younger pupils. However, teachers will find the material, while they could be argued to be essential reading for the general public.

CLASSIC EXAMPLES

Rocks and Minerals. By Paul E. Bristow. H.M.S.O. £2.50. 0 600 3756 4.

The author is the Keeper of the Mineral Division of the Smithsonian Institution in Washington, which houses one of the world's finest mineral collections. He has written and edited a number of books on mineralogy and they are excellently recognizable by the excellent colour plates of the minerals discussed. Twenty-eight mineral species are illustrated and described, and there is a section on radioactive minerals. In each section there is a two-page colour spread of the mineral, a page

The Agricultural Mid-West. By Ron Brown, Haddon Kelly and Ian Rendy. Heinemann Educational. 95p.

Heinemann's range of contributions to school geography is continued in a series of North American Geographies for the upper school. *The Agricultural Mid-West* appears as the second in this series of which one characteristic feature is a format so compact that some illustrations are reduced below the legible optimum.

An obvious problem arises here over definition. This is nothing new, since geographers have little to learn about ambivalent definitions, even from earlier experts like Humpty Dumpty or the high priests at Delphi. In the present instance, the Mid-West, as that term is understood in North America and beyond, is a small map outlined just once, in a small map on page 62. Thereafter, the authors unilaterally re-define their area to include the Prairies and the Great Plains, while the discussion ranges from New Mexico to Alberta.

At the same time, the book has certain directly commendable features. Its strong central theme concerns the major nineteenth and twentieth century land use adaptations within the region. Along with this go detailed exercises on Kansas agriculture, on the Flying B. Ranch in Alberta, and on map-pairs for counties in Missouri, Kansas and Colorado. Modern developments and future trends are outlined in the latter part of the book, which concludes with a directory index. Altogether, however, a valuable resource, with plenty of relevant detail and stimulus variation.

The booklets produced by the International Defence and Aid Fund should be seen in this context. This organization "seeks to keep the conscience of the world alive to the issues at stake in southern Africa by providing authoritative comprehensive and well-documented information" as well as by providing material assistance to people as necessary. It is therefore concerned with this one area of the world. It might be wise for the reader to recall that similar booklets could be obtained on other areas such as the USSR, eastern Europe and China which would also reveal a great deal of hypocrisy and tyranny there.

Nevertheless, each booklet is an eye-opener merely by the statement of stark facts given in answer to a long series of questions; for example, "No land was allocated to Coloured or Indian people" and "The decision to become a Republic was taken by referendum in which only whites took part. More might be given and why the language of the booklets is suitable for sixth-form but certain political expressions make it rather complicated for younger pupils. However, teachers will find the material, while they could be argued to be essential reading for the general public.

John Draycott

31 Books/Geography/Geology

MONOGRAPH

Introducing Geology. 3. Physical Geology. By John R. Allen. Allen and Unwin £1.85. 0 04 55022 1.

This is one of a series of four books, the others dealing with fossils, stratigraphy and rocks and minerals. All are monographs by specialists. This volume has 11 chapters dealing with such subjects as the structure of the Earth, weathering and soils, sedimentation, rivers and underground waters, the sea, the work of ice, and Earth movements and it is liberally illustrated with photographs and line drawings. The book is suitable for O level students.

There are two notable omissions. The first is the formation of rivers from youth to old age, which most authors describe in great detail. As this is more nearly related to geography, only the truly geological work of rivers, their erosive power and the part they play in transport and sedimentation, is quoted here. (I am sorry, incidentally, that the author refers to the sandbanks which produce cross or current bedding as dunes as we usually reserve that term for desert features and it will tend to confuse O level candidates. It is better to be precise in distinguishing such features at this level.) The other omission is the types of volcanoes and concordant and discordant bodies, so faithfully reproduced by nearly every author since Holmes. Unfortunately this section is popular with examiners as a source of a fair variety of questions.

Continental drift and modern ideas of sea-floor spreading and plate tectonics are covered in a very few pages at the end. Although this book is useful for the library, monographs fail as textbooks at O level as so many are required to cover the syllabus that the cost is prohibitive.

Harold W. Appleton

IRISH SCENE

Geology and Scenery in Ireland. By J. B. Whitton. Penguin. £1.00. 0 1402 17916

Dr Whitton divides his book into 17 chapters. Chapter One is devoted to a general, and very brief, introduction to structural and tectonic geology. The other chapters describe and explain the evolution of the physique of particular regions of Ireland; the Antrim Plateau, South-East Leinster, and so on. The text is illustrated with 46 informative maps and diagrams by 18 carefully chosen photographs. In addition to considering the physical landscape Dr Whitton also comments on the cultural landscape in so far as it reflects geological influences: "... a planned village has sprung up at Luncarty, a town to accommodate the employment of the milled peat bog workings." Of Cork he writes: "... the most fascinating architectural spectacle ... is the campanile of St Anne's Church, ... as for as to demonstrate Cork's location astride a geological fault, its very tower has two distinct sides of limestone and two of sandstone."

To follow Dr Whitton's text properly the reader must constantly refer to the relevant Ordnance and Geological Survey maps. The geography of Ireland is often complex both in form and origin. Necessarily, therefore, the author has to treat certain areas in great detail in order to present a satisfactory picture of their morphology and its development. This is particularly true of Donegal and northern Ireland generally, although Whitton does not mention the complex ridge and valley province of east Munster. Much recent research is included in the book, including the classic work of the late Dr Farrington, which deserves widespread recognition.

The need for a modern and inexpensive book on the geomorphology of Ireland has been acutely felt by many teachers and lecturers. The many teachers and lecturers, who are sad to say, are often faced with the difficult task of obtaining regional texts, such as Freeman's *Irish Geology*, which is a superb, but very expensive, and difficult to obtain, although important and useful in their own way.

John Draycott

ITEMISED SKILLS

D. B. Hall

Teaching Geography. By Patrick Bailey. David and Charles. Teaching Series. £4.95. 0 7153 6860 5.

In true Socratic tradition *Teaching Geography* is a full-length dress mirror for the specialist teacher, which his own sense of what is an appropriate subject costume can be displayed, and a consultant's report on the taste, fashion, and extravagance prepared for the practitioner. Of course, mirrors in geography teaching are hardly a new innovation. Our existing collection includes numerous handbooks, such as that recently published—in its sixth edition—by the London Institute of Education (Methuen, 1974), and the essays in *Directions in Geography Teaching* (Walford, Longman, 1973). But one distinctive merit of Bailey's book is that it is a mirror hand-fashioned by one author alone; it has the organic unity which eludes the edited compendium. Like the HMSO Education Pamphlet No 59, *New Thinking in School Geography* (1972), there is a stress on the working within a wider setting than a subject, but *Teaching Geography* is more detailed and direct in its treatment.

The first three chapters review the ideas and skills which are distinctive to geography. Skills are clearly itemized, there is some reference to Piaget's influence, and to sub-cultural problems of learning, particularly in matters of spatial ability. The author is cautious rather than prescriptive in his consideration of recent developments, covering statistical methods, theoretical models, games, and perception studies.

The group of chapters on school organization and management against the background of comprehensive reorganization are fresh, original, and the commentary running departments and syllabi, planning particularly valuable. Bailey believes that courses based on pre-structured concepts are often unfeasible, and he propounds the heresy that region-based studies may give the teacher the greatest freedom.

Later chapters cover examinations, room design and equipment, audio-visual aids, and fieldwork. Here the author competes directly with the standard handbooks. The most successful is that covering fieldwork, based upon his long and varied personal experience. It may be the fault of editorial, but there is a lack of imagination here which fails to separate commentary from information by the use of varied point type-setting. It may also be linked with the curious bibliography where the place of publication but not the name of the publisher is given. A lexicon edition would have been preferable, in terms of price and in the knowledge that references and illustrations inevitably date rapidly.

Self examination may well be idle fancy or in the sense that the unexamined life is not worth living, the key to a full and useful life. At the end of the review I remain intrigued by the author's quote of Kjellén: "... the most important thing in the love of landscapes of plates 3 to 5 the like of which I thought had died at the time the GCSE replaced the School Certificate. I just wonder, if we are so lovingly involved with the coloured chalks, whether there will be much time left for Socratic reflection?"

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International soundings

Geoffrey Howson, University of Southampton, discusses the recent mathematical seminar at Salzburg

International conferences and seminars on mathematical education have flourished for almost two decades. At the famous meeting at Royaumont in 1959 and its immediate successors, the course of action was clear: to design a syllabus fit for future mathematical heroes.

The international meeting provided a stage upon which members could argue the virtues of the solution offered by their own country — sets for six-year-olds, matrices for the million, groups for the general. Only one kind of child seemed then to be considered — the future mathematician who, by an early age, had demonstrated his right to belong to the academic elite.

Nearly 20 years after Royaumont, the emphasis has changed. In many countries the reforms have lost their impetus with the realization that the provision of new materials alone achieves little. Again, educational change, brought about by social pressures, mean that it is no longer always feasible to isolate children of "academic ability" and to ignore the rest.

It was in this frame of mind that some 20 teachers, representing 10 Western European countries, attended a recent seminar at Salzburg organized by the School Mathematics Project. Two particular themes were studied: mathematics in the comprehensive school and "the teacher and change".

The extent to which educational systems have "gone comprehensive" varies considerably, as do the experiences gained. That was to be expected. Nevertheless, it came as a surprise to the writer that only two or three of the countries appeared to take comprehensive education to its logical (or illogical, depending on one's personal preference) conclusion, the mixed ability class.

Although there was general interest shown in individualizing instruction and in promoting group work, I got the impression that most countries of Europe are unlikely to abandon homogeneous grouping in the near future. It was also apparent that such comprehensive education as was offered often came to an

end at about the age of 14. Even if pupils still remained in the same school after that age, differentiation of some kind usually occurred. One was reminded of the official report from one country — not represented at Salzburg — which recommended that all pupils in the age-range 12 to 14 should follow a common course, but that this was not meant to imply that they should work at the same rate, use the same methods, or follow exactly the same syllabus.

It was clear, though, that even if traditional groupings remain, then the introduction of such new approaches in the classroom will impose considerably greater demands on the teacher: changes which will be at least as difficult to implement as those in content. It was in discussing the nature of such demands and how they could be most effectively met that the seminar reached its second theme.

There is no doubt that curriculum developers in the 1960s devoted insufficient attention to the rôle of the teacher in curriculum development. The actual processes of change and the problems of large-scale dissemination were virtually ignored in a frenzy of syllabus construction and material preparation. We in England involve the teachers in the process of curriculum renewal than do many countries: the Schools Council is teacher-dominated and the SMP itself, along with most other independent projects, is teacher-based. Yet the number of teachers playing an active part in the direction and evolution of any SMP is minute compared with the number using its texts.

How is a project or ministry successfully to communicate its aims to a vast number of teachers? How does one best ensure that these aims do not become distorted and garbled in classroom use? Are teachers to be trained so that they can adapt to change? What part should teachers play in the actual construction of curricula?

The answers (if they exist) to these and many similar questions raised at the meeting, ultimately hinge on three considerations: the kind of pre-service training given, the opportunities for in-service education, and the status of the teacher within

society and within the educational power.

All three considerations are factors in that most crucial professional status of teachers to this key point that discussions continually compared comparisons with the medical and professions, even if only in the lightning, in the responsibility of the degrees of autonomy.

In the past the teachers have received considerably less training than his counterparts in finance available and the demand for teachers has increased rapidly expanding the national system has ensured that

Now, however, changing throughout Europe is still a great shortage of every mathematics teacher in every country, but there is an overall shortage of teachers, we have vast numbers of mathematics teachers suddenly available, it would be difficult to place them in schools. We are not posts exist. We are not period in which it is becoming more and more difficult to find efficient and demanding

Such measures, although considerable long-term effect however, have little immediate present problem. In some were told, 80 per cent of teachers will be needed by year 2000 are already here. (Here, of course, one is one's trust, however limited educational planners' club.

The corresponding figures in England and other countries no doubt differ, but the problem appeared common. Professional status can only therefore, on the acceptance of professional responsibility, attainment of professional status by teachers should be in service, rather than in-service education that holds.

It is a mark of a profession's members organize the and that individually willing, and able, to make and to take responsibility. In the first respect the

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Setting for the seminar: Schloss Leopoldsdorf, Salzburg.

Continued from previous page

noted with interest the foundation in Scotland of a Teachers' Council.

Clearly, in many countries the teacher is not yet allowed to make decisions and it was argued that because of a lack of suitable training many are incapable of doing so from a position of knowledge and professional competence.

Yet how does one reach and help such teachers? It was common experience that no more than a third of teachers take advantage of the in-service education at present provided. Should financial inducements be given or should it become an explicit part of a teacher's contract? In England the successful completion of some form of in-service education could be linked with a move from one salary scale to another. Yet this strategy is denied other countries which usually have a single pay scale for teachers and have no heads of departments or posts with special responsibilities.

Who, however, would be responsible for determining the form of such in-service training? Would it be left to the ministry or to a "paternalistic" university school of education? Clearly, professional status demands that teachers themselves determine the nature of their training.

Yet, might this equally lead to decisions being taken on political rather than educational grounds? The problems are great, but they must be clearly and patiently argued out if in-service training is to be organized so that it leads to

greater professionalism rather than less.

These remarks apply to all teachers, not only to those teaching mathematics: the situation is complex and the way ahead far from obvious. Within mathematical education the situation is even more complex and the events of the past 20 years have brought us no nearer a consensus of opinion on what our aims should be. Whether or not such a consensus is possible, or even desirable, was a matter for discussion. It was, however, generally accepted that an absence of clearly defined aims is not only a possible hindrance to the recruitment of able young teachers, but also a cause of considerable bewilderment to many teachers in post. Moreover, a partial set of mathematics teachers is easy prey for the administrative staff in Salzburg feeling that useful international communication could take place on many of the topics we had discussed. (And I have often felt that future seminars should now leave the level of generalities and experience-exchanging and should study certain key issues more deeply.)

Two themes in particular were mentioned as possibilities: consideration of what professional qualifications and training teachers at various levels should possess (and growing European cooperation lends weight to the need to do this on an international basis), and a critical analysis of various modes of in-service training. Both would lead to offer valuable and exciting possibilities.

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The Fife Mathematics Project

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This report analyses one attempt to meet and overcome the special problems posed by mixed-ability classes. The experiment began when some schools in Fife began using a series of workcards to help first-year children to explore at their own pace some of the essential ideas and concepts of mathematics.

Theory and practice meet

—to their mutual benefit. By Professor R. R. Skemp, University of Warwick

For nearly 10 years a small group of us has been meeting about eight times a year to discuss the teaching of mathematics. Thinking about the factors which have kept the group in being has led me to realize that it embodies on a small scale a relation between theorists and practitioners from which something useful can be learnt about mathematics and about this kind of interaction.

How did it start? And what have done and teachers to offer each other which in the present can be proved sufficient to keep up meeting regularly over the years?

The beginning was a weekend course on the psychology of learning mathematics, held at a beautiful Elizabethan manor at Stoke d'Abernon, owned by the ILEA and used by them as a residential centre for London teachers. The course was organized by Gerald Gray, now retired, and Laurie Buxton, then district inspector for Islington, and now staff inspector (mathematics) for the ILEA, who has convened the group ever since. There were a series of regular meetings, and once a year we are still able to spend a few days together at Stoke d'Abernon.

Part of the value has undoubtedly been in the wide range of viewpoints. My own approach is strongly theoretical. At the other end of the spectrum of views are primary teachers, who are child-centred and necessarily concerned with the practical affairs of the classroom. In between we have several college of education lecturers, whose job it is to relate these views to the practice of secondary schools. Including heads of mathematics, who tend to be more subject-orientated than the primary teachers; a deputy head teacher; and Laurie Buxton, whose universe of discourse includes all these. The number at Stoke d'Abernon is usually between 35 and 40 — a population changing slowly over the years around a core of long-term "regulars".

It has always been made clear that we would be discussing long-term theoretical issues, so that no one would be misled into coming in hopes of new classroom material. But my own conviction is that a good theory is the most practical offering one can make to a teacher. If someone has to construct or service electrical equipment, what he needs most is that which he is unlikely to discover by himself, namely a knowledge of electrical theory.

He can teach himself to solder, and if necessary improvise his own screwdrivers. The man on the job may be good at making his own observations, but only a theory will tell him what is behind the observations. It enables him to understand, predict, and sometimes to control by relating the things to a unified body of knowledge.

During the past decade there has been much innovation in both the teaching and the content of mathematics. That which has not been soundly based on appropriate and valid theory has at best been trial and error learning, and at worst, keeping up with current fashion. Children pass through our educational system but once, and we must do better for them than this.

What has been interesting is the degree to which these views, usually stable in a convinced theorist, have found an echoing response in experienced, down-to-earth, practical teachers. Not in so many words: the day has yet to come when I hear a teacher say "What we need is a valid, relevant theory". The response is indirect: in the amount we find to say to each other: both about the theoretical ideas themselves, and especially about the ways in which these relate to their own teaching activities and observations.

Among the topics which we have discussed together over the years are the formation of mathematical concepts, schematic learning of mathematics, relational and instrumental understanding, meta-learning relative to mathematics, and the motivation and direction of

mathematical learning in the classroom.

The benefits to my own thinking of working with this group have been great, and such as could not easily have been obtained from talking to my fellow-academics. Much of my new thinking has been crystallized into some kind of exposition under the stimulus of a coming meeting of this group; and has been influenced, favourably I believe, by the constant awareness that I was preparing a talk for busy teachers, who were giving up a weekend at home in the expectation of hearing and discussing matters of genuine relevance, not armchair speculations from an ivory tower.

There are practical reasons why it usually seems to be necessary for theorists and practitioners to be different people. One is simple. It is unwise to change horses in mid-stream, and while fully engaged in teaching it is best to stay with familiar methods in which one has mastery and confidence until one has something better for sure, and well established in one's own mind, to take its place. The state of creative uncertainty about a topic which has to be accepted while waiting for a new idea to take shape is never comfortable but would be intolerable if one had to teach this topic to a class of tough adolescents.

Another reason is time. Thinking is slow and hard work. Putting the results on paper, or into the form of a discourse, is time-taking and laborious. To find this time is not always easy even for teachers in universities. For those in schools, though it is possible and is done, this is usually over a fairly short term, and at personal sacrifice. So long as for practical reasons, theorists and practitioners have to work separately for much of the time, it is all the more important—again, for practical reasons, some of which have been outlined above—that they come together regularly in ways such as have been described.

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Children Using Mathematics

A report of the Mathematics Section of the Association of Teachers in Colleges and Departments of Education
Edited by J. Glenn, K. L. Gardner, and A. I. G. Renton
136 pages 19 919010 0 £1.25 net

The teaching of mathematics is undergoing rapid changes in syllabus and method. This report discusses the principles on which a modern work scheme could be constructed, taking into account both the mental growth of the young child and the aims of mathematics teaching.

Other sections deal with the evaluation of apparatus, the problems of assessment, a discussion of the place in primary work of the technical vocabulary of current mathematics, and a note on the place of appendices giving supplementary information, and one of these is devoted to the content of professional courses.

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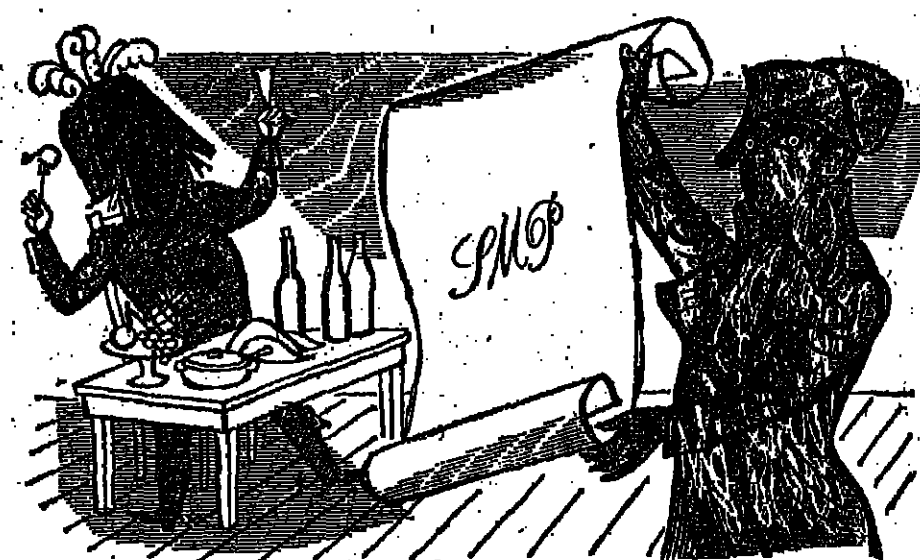
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How industry can help to improve entrants' standards

By Peter B. Coaker, British Petroleum Company Ltd.

In recent years there has been extensive publicity about the mathematical shortcomings of the school-leaver when entering industry. Two conferences have been held in Nottingham in the last two years to discuss this point, and representatives of education and industry were present.

Much of the blame has been placed on the incidence of modern mathematics in the school curriculum although it must be recognized that at the same time there has been a serious shortage of qualified mathematics teachers. It could well be that given adequate numbers of qualified teachers the modern syllabus would have led to an improvement in mathematical understanding.

The writer's own company has been concerned about the shortage of teachers ever since Bryan Thwaites made his famous observations in 1960. We feel that there is a large part that can be played by industry itself to help to improve the situation.

One of our first contributions was to arrange, with the cooperation and assistance of the Mathematical Association, a conference of mathematics teachers in a hotel in London. There were talks and discussions about the teaching of the subject, and the author was one of the BP contributors on the topic of the use of mathematics within industry.

One outcome of the conference was the Mathematics in Education and Industry (MEI) project. A number of successful branches were formed, of which one might mention those in the Bristol-Bath and Sheffield areas. Contacts between schools and industry were encouraged and assistance was given by the Schools and Industry Committee of the Mathematical Association. Funds for this work were provided by the industry and many companies assisted with the activities of the branches.

In addition, we have made a number of contacts with the school-teaching fraternity in order that they might be able to put some real life background into the teaching of mathematics. It has often been observed that all too frequently those teaching in schools have only existed within the school/university/school cycle and have made little contact with the real world outside. Pupils today demand to know the reasons for the subjects which they are asked to study—thus, any move to introduce realistic problems into their learning must help in their understanding and motivation.

As a result of these contacts, a number of teachers have visited the company during their vacations and have been given the freedom to move within the head office departments in order to study the use of mathematics. Many of them have been based with the operational research department, but others have been attached to the research centre. Visits are made to the refineries and most of the mathematical techniques used—some of them in very early stages of development—have been discussed. Contacts have been maintained with teachers who have visited the company in this way, and it would appear that their classes have benefited from their experience.

Other companies have made similar facilities available and we are sure, with similar benefits. The only point to emphasize in any of these visits is that they should be coordinated by a member of the company who has sympathy with the educational aims. Similar visits have been arranged also by the Department of Education and Science, but these have been concerned mainly with teachers of computing at colleges of further education.

One further way in which industry can assist education is by the funding of teacher Fellowships at a number of universities and polytechnics. In many instances, finance is requested for a particular study and, subject to the

economic climate, this financial help is forthcoming from the source. My own company has funded a number of Fellowships in mathematics and computing in these our philosophy is that should concern ourselves in the original setting up of the project and satisfy ourselves that we should obtain a close relationship with the work that the Fellow is doing.

As particular examples, I would like to instance the school fellowship at Southampton University where Mrs Pam Parsons is studying the relationship between outdoor sciences and mathematics. Although not a mathematical problem in itself, it is a very real problem to try to find a way of combining the two subjects. The general engineering and the general engineering which will lead the student to request mathematical tests, to ask them what they are for, and to observe their observations.

Another Fellow is Roger Jones at Bath University who is using the use of mathematics in engineering firms. By means of a questionnaire he has asked companies to supply him with information and many of these have been visited.

My third example is that of a Fellow at Keele College, who, in their single terms of science, have been doing research into the use of mathematics in the design of a new type of material for self-study by pupils who suddenly find that they require to learn mathematics. This material is being developed in conjunction with subjects which previously thought were unrelated. Particular topics are mathematics for geographers, biologists and chemists.

In addition to the above, I like to mention the post-graduate of in-service training in mathematics at Durham University. Having the success of the Centre in Nottingham, the Mathematical Council approved funds to set up similar post-graduate universities and BP were fund that associated with Durham. Although other funds were forthcoming at the time, it is hoped that more industry will consider helping to set up posts by providing "pump-priming" finance. This will enable relatively few mathematics teachers that do exist, and those who have to touch mathematics through the subject matter, to be helped and advised in the planning of their classes to keep in touch with modern mathematical trends.

Hugh Nell, the present holder at Durham, has been very helpful in arranging meetings with teachers in his area, in their about new topics and arranging contacts with industry. The work done has proved successful and the local educational authority is gradually taking financial responsibility.

As an example of how industry involvement does not stop with the funding of these Fellowships, twice a year we hold a conference of all the BP Fellowships, mathematics and computing, including some of those who have been funded. These conferences have proved to be a very useful forum for the exchange of ideas in order to enrich the work that each individual Fellow is doing. Additionally, we are trying to find that new ideas are arising from these discussions. To this end, we have invited members from the various universities and polytechnics to attend our conferences as well as members of HMI, to attend.

We feel that only by involving industry in this sort of work can we hope to improve the standards of mathematics in the future. Also we view this as a need for the country as a whole and not just for our company. When one is selling products, technology it is necessary to understand the needs of the customer. Thus, the greatest gain may be to the customer.

'Let the dog see the rabbit'

Mathematical shortcomings at the school/employment interface. Robert Lindsay, Shell Centre for Mathematical Education, University of Nottingham, recapitulates some thoughts he expressed at 'Interface Two', and reports on some other opinions expressed at that conference in July.

Many employers, particularly engineering firms, use batteries of tests to help them to select certain grades of employee fresh from school. The same tests are used year after year and so enable comparisons to be made and trends to be observed.

From these it can be shown that, while the results of the tests of verbal and spatial intelligence have remained fairly steady, the mathematical tests show a disturbing decline over the past three to six years.

These mathematical tests are almost entirely arithmetical, except for some which include a few questions on the most rudimentary algebra, geometry or trigonometry. But what happens if you ask to see them? The contract with the vendor is to try to find a way of combining the two subjects. The general engineering and the general engineering which will lead the student to request mathematical tests, to ask them what they are for, and to observe their observations.

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Otherwise, at the employer's testing time of March-April, teacher and pupil will be more concerned with the quite different objectives of CSE or GCE than with the undisclosed content of a test which is obviously of so little importance that no one bothers to take schools into their confidence about it.

No one bothers? But some do, as Mr J. J. Benson, of the British Aircraft Corporation, related: "After testing, we decided to inform the candidates who had failed in mathematics. One head who had seen six such letters listened incredulously to an account of their mistakes. On learning that they would have been accepted but for their mathematics, he begged for them a second chance, with the result that, after additional work and several weeks later, their scores were doubled and they were accepted."

The moral could be that heads should insist on such candid exchanges of information and that the heads of mathematics departments and training officers should establish a mutual understanding about the nature of these tests.

We also conclude that such mathematics tests, since they are so susceptible to the effects of teaching, are neither positive predictors of future success, nor tests of mathematical aptitude. Their crude virtue is that they plainly indicate: "If you can't do these, then you're going to give yourself and us an immediate problem which we can both ill afford."

Occasionally a home-made test which reflects more closely the real requirements could prove a more relevant selector, and the dog may then legitimately be allowed to see a few superannuated rabbitat Pitfalls in the designing of tests which could predict which entrants

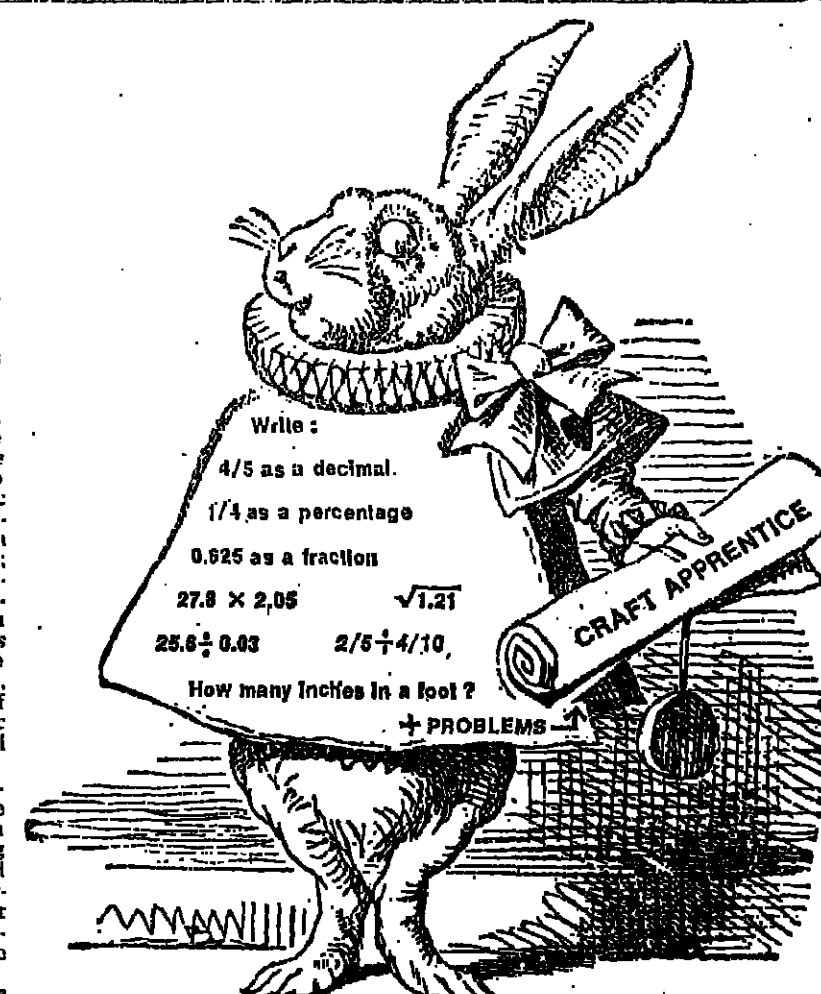
might be a training risk were discussed at the conference by Lieut. G. W. Allan, RN, while Mr. I. E. Cooke expressed his misgivings about modern O levels becoming less satisfactory as predictors of success at ONC during the past three years.

The conference also explored some possible ways of exploiting the examination system in order to direct more attention to basic skills; that there should be a compulsory computational section with a high pass-mark of 80 per cent; that this might either be a necessary condition for passing the examination as a whole, or merit an endorsement to the certificate, thus fulfilling a role analogous to the language oral or, alternatively, that there should be a series of graded tests, analogous to music examinations, which the pupil could take in his stride.

Miss Ruth Rees, of Brunel University, demonstrated how the acquisition of skills is, through widespread neglect, not reinforcing the acquisition of concepts, and declared that, like love and marriage, you cannot have one without the other; which none dared gainsay! Nor was anyone so indelicate as to ask which should come first.

Dr Alan Rogerson presented a digest of SMP plans: the 7-13 work cards, with emphasis on place-value and arithmetical skills; and the new series of supplementary books for secondary schools, giving more manipulative practice, which will appear next year in response to the suggestions of teachers who have identified such needs. That SMP has responded to their suggestions will give a timely hint to those who have clung too slavishly to their textbooks. (See page 55.)

Mr Nigel Webb, coordinator of the SMP "Computing in Mathematics" group, offered these uncon-



With acknowledgements to Lewis Carroll.

tested recommendations: that a section of an examination paper should deal with mental arithmetic problems; another section with flowcharts for checking procedures, and with rough estimates; in the main part, wherever applicable, the answer should be left in a state ready for the use of a calculator, but a rough estimate would be obligatory; finally, there should be the equivalent of a language oral to test the use of the calculator.

Post-school, for reasons both obvious and profound it was accepted that, in the viscous environments of lubricating oil or cloying dough, calculators were not so handy. Mr Jim Boucher, sometime member of the Nuffield mathematics team, and now head of a large primary school, gave the lie to the primary school myth that we need no longer make children learn their

Continued overleaf

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Devising a continuous monitoring procedure

'TAMS' Tests of attainment in mathematics in schools: a feasibility study, by Ray Sumner and Irene Kyles, NFER

The "TAMS" project was commissioned by the DES to investigate the means for surveying attainment in mathematics of pupils aged 10 to 11 years and 14 to 15 years. Specifically, it was to construct a bank of items for each group and propose a design for using these materials in a continuous monitoring procedure.

The project started in 1972 and, with the current extension, is due for completion by April, 1976. A DES steering committee has supervised the work, while specialized help has been obtained from two sources—an advisory working group enlisted from bodies concerned with mathematics education and also from the project's consultant, former staff inspector, Mr R. C. Lyness.

An early decision was that the materials should represent a "profile of mathematics attainment" so that a survey could indicate how performance in various aspects of the curriculum alters over the years. Our first task was, therefore, to consider how the curriculum is characterized for such age group and, consequently, to define the profile components.

In this respect, there are few accepted sources but eventually a set of category headings was evolved, with a detailed list of topics and activities under each one. Categorization involved many compromises and its orientation to-

ward "content" as distinct from "process" and attitude was a source of concern. Also, there was no specific provision in the original brief for assessing practical work, but this was added later.

Excluding practical mathematics, the first stage primary profile had 14 categories, while the secondary profile has 16 categories. Details are given in the forthcoming NFER report. Examples are as follows: Primary: properties of numbers and operations, calculations with fractions, geometry, mathematical handling of everyday situations, sets and relations. Secondary: solution of equations, logical deduction, problem solving, graphical representation, calculating aids.

In spite of the large number of items in this field, the breadth of our profiles was such that much of the content was created from scratch. Furthermore, in view of their purpose, i.e., to indicate what pupils can do and to detect changes in performance over time, it was decided to concentrate on devising questions requiring short written or diagrammatic answers; a few multiple-choice items were drafted when the form was especially appropriate.

In all, well over 1,000 items were drafted, tried out in schools, analysed for percentage correct and discrimination, reviewed and then used in a second trial. Translations to Welsh versions were supplied to

schools in North Wales for the second round of tryouts of the primary materials. More than 150 schools collaborated in administering items and commenting on them. Only a small number declined their assistance and the balance of comment was favourable. Pupils in the same class received different test papers from their neighbours, with up to eight tests being done at the same time in the classroom.

Eventually, about 450 primary items and 600 secondary items were developed to a satisfactory standard. Each one fulfils accepted statistical criteria and also fits (and contributes to) a category calibration that enables different selections of items to be given at different times or to other samples of pupils. This scaling technique would provide directly comparable scores for performance on a whole category.

The scheme for the survey would require small, termly samples, none of which would give definitive results; but each round of assessment would contribute to a "rolling-mean" building a clear picture of the profiles in a relatively short period. After an initial period to establish a baseline the profile could be kept up to date.

This system would be a considerable advance on the periodic, irregularly spaced surveys, used for

reading. Schools would be approached to contribute to a general survey at widely spaced time intervals; perhaps 10 or 12 years apart. Neither individual schools nor pupils would be remarked on in a survey report, as the focus would be on the trends revealed by the aggregated samples. Qualitative, as well as quantitative, findings could be given—by commentaries on the various methods of working, or discussion of common errors.

Practical mathematics assessment was explored by colleagues seconded from Billingsley College and a Blackpool primary school. The object was to see whether a written test on the same questions gave a different result from an interview/practical assessment conducted by a visiting teacher briefed in the use of test material. A significant difference in favour of the practical mode occurred.

Among other findings, two of general interest were that (i) the experience in the practical mode enhanced later performance with the written test and (ii) the less able pupils (secondary VRQ below 92) did much better relatively in the practical mode (see graph). From our standpoint, the finding that assessment by visitors yields reliable results—at least good enough for survey purposes—was an advance on the periodic, irregularly spaced surveys, used for

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MATHEMATICS TEACHING, reviewing the first edition in 1971

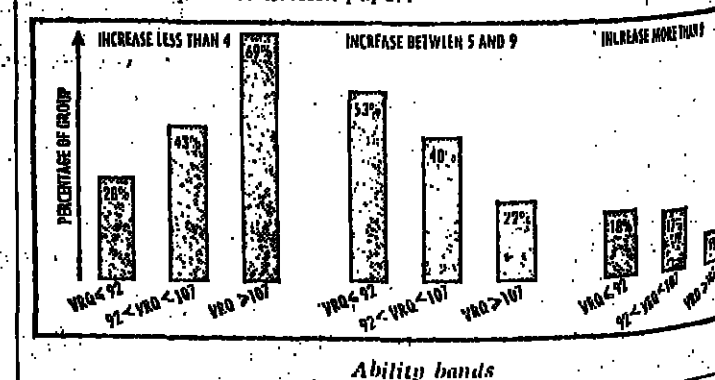
This Autumn's additions to the course include: a set of Overhead Transparencies to accompany Book One; and Mathsheets 2, the second set of worksheets for mixed-ability classes and less able pupils.

The series and the thinking behind it are fully described in Newsletter 6, which may be obtained, along with inspection copies of individual books, from either publisher.

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Differences of scores on two tests, Test I-Test II:

Test I: an interview/practical situation.
Test II: a comparable written paper.



Continued from previous page

number bands, scorning those who doubted that all but a few could acquire 36 facts in four years, in spite of some remarkable distractors from that task.

Professor Warwick Sawyer, a close observer of the creation of the American modern programmes, described the elaboration of sets as an unhealthy legacy of the reforming zeal of college dons, who gave advice while under the influence of topology. For most children "sets" is a sterile topic which leads nowhere and they would be better employed on other things, as many teachers are now beginning to perceive.

Concerning the twin secondary school myths about total mastery and the demise of vulgar fractions, the DES Administrative Memorandum 9/74 gives advice which, since 1969, has been consistent and long-sighted and which conforms with the expressed needs of industry on both these questions. It also places the onus on

the educational service "to must keep in step with changes and cannot force pace". But are we sure that critical decisions have always been made with such circumspection?

Professor Vernon Armitage, filled from the debate some recommendations for the recommendations of all teachers: a national level in mathematics; a pre-test; a pre-test course in sixth form, or in FE, to give perspective teachers up to date on the state of the art; and a reassessment of objectives of the professional teaching for mathematics.

Finally, as a numerical standards teaching profession are low, then might it not be better to cut our coat according to the cloth and abandon the modern programmes devised by teachers and less easily understood techniques?

A detailed account of this reference may be purchased from JMA.

What is SMILE?

A secondary mathematics individualized learning experiment explained by Denis Frost, Warden, Ladbroke Mathematics Centre, London

SMILE (Secondary Mathematics Individualized Learning Experiment) is a mathematics project at Ladbroke secondary schools and many schools outside the LLEA who have heard about it from London teachers.

A SMILE classroom is informal with the child having the responsibility for finding his work, the work card and the materials he will need for the task. The matrix of work is completely individualized so that each child is doing work that he is capable of tackling.

A solid structure underlies the scheme so that the teacher's role is relieved of the general routine classroom organization and is able to give much more time to individual children's needs.

Each child is given an individual matrix of 10 assignment cards. He can work through these in any order depending on the availability of cards and equipment. On completion of a task he refers to the answer book and marks his work. He then shows the marked work to his teacher who initials the child's matrix against the appropriate task.

The child continues with the remaining tasks until he has completed the matrix. He then does a short test on each of the 10 tasks which enables the teacher to check what he has understood. This matrix test also prevents the child from copying answers from the freely available answer books.

When the matrix test is completed, the child does a mathematical game or puzzle to keep him happily employed while the teacher marks the matrix test and sets the results of these tests to the new matrix.

As the scheme is completely in-

dividualized a child may be working, for example, at a level far ahead of his mathematical age on geometry but at a remedial level on computation. The cards are arbitrarily numbered so that a high number card could be for a remedial task. The children seem to be happy with the "tailor-made" matrix and prefer it to work set from a formal textbook when a few bright ones are bored and the less able are completely lost.

At the beginning of each lesson the children enter the room, pick up their folders, obtain the necessary equipment and continue where they left off. The only demand made upon a teacher is to sign off work completed by the children. The teacher is free to offer a suggestion, ask a pertinent question, give a place of encouragement or suggest that a child tries another approach to the answer.

In a SMILE classroom the role of the teacher has become that of an adviser rather than a dictator. Much more contact has become possible between child and teacher. The marking of the matrix tests and the setting of the new matrices is done outside the classroom with the use of a teacher's manual. In many schools the children take the cards home for homework.

In November, 1972, a week's conference on "Mixed Ability Teaching in the First Years of the Secondary School" was held in the Ladbroke Mathematics Centre. Mr Jim Mayhew, HMI, then an ILEA maths inspector, directed the course and invited Mr John Stewart, then head of the maths department, Chelsea Secondary School, to talk about the scheme he was using which was a development of the "Berkie" Banks West Kent Maths Project. (See page 51.)



Working at their own pace. (A photograph from "Contact", the ILEA teachers' magazine).

Great interest was shown by the heads of maths departments attending the conference and it was agreed that a mini mixed ability project be started. Twenty schools decided to participate in the self-help nature of the scheme. The "pilot" schools were to transfer money from their school allowance to the Ladbroke Mathematics Centre allowance so that cardboard and paper could be purchased and converted by the centre into work cards, test sheets and answer books.

Monthly meetings of the project were held throughout the remainder of the academic year 1972/73 and it became obvious that a full-time coordinator was needed as the project expanded. Mr Ronnie Goldstein, a teacher in one of the "pilot" schools, was seconded in September, 1973 as an advisory teacher to coordinate the project.

At the end of the first year cards 0001-0300 had been duplicated by the centre and we had many ILEA schools inquiring how they could obtain SMILE material. With only a part-time secretary the

centre could only provide the "pilot" schools with SMILE material. ILEA came to our aid by agreeing to have the first 300 cards printed so that "second phase" schools could take part in the project. This year we are having a further printing of the next 200 cards so that cards 0001-0500 will be available.

Of the 50 ILEA schools now taking part in the project, some are operating SMILE in first to fourth years, some have just begun in their second year and others have just begun with their first year. Twenty-one schools outside ILEA have purchased cards and are operating the scheme. Other sets of cards have been sent to teachers' centres and colleges of education as far afield as Denmark and Tasmania.

For the past two years a week-end conference has been held and on each occasion 60 teachers from SMILE schools have attended and added their expertise to the project. Two full-time longer courses have been organized and 16 teachers attended for 30 Mondays

last year and 20 are at present attending. These are mainly production days and, as well as producing cards, we have been trying to add audio-visual aids, mathematics modules and investigations to the tasks.

The SMILE project is run for teachers by teachers and committees have been formed to look at the mathematical structure, commercial material and the possibility of examinations for the project, perhaps in the first instance a Mode III CSE. The great advantage of the project is that it is fluid. Commercial material like the "Dime" project and "MMCP" can easily be inserted. One "pilot" school is using video-tapes where the card asks the child to look at an extract from a mathematics TV programme and then answer questions.

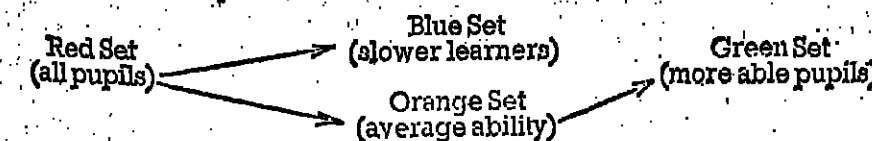
Anyone interested in seeing a SMILE school in action or who would like to know more about the project should get in touch with us. Expect a little delay as we are a teachers' centre and the SMILE project is only part of our work.

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Statistics and the Continuing Mathematics Project

R. J. Hayter writes about the contribution CET (the Council for Educational Technology) is making to the current needs of schools in a subject of growing importance in the syllabus

Up to 10 years ago many mathematics graduates completed their degrees without having had an opportunity to take a course in statistics. The worthiness of statistics as a topic for study by potential mathematicians was apparently doubted by many academics, and often the subject was available, if at all, only as an optional course.

Nevertheless, in a number of disciplines the use of statistical methods has increased considerably (some might say alarmingly), and it is to the mathematician that users of statistics will turn in the hope of finding help. It can be presumed that many of these users will be disappointed when they find mathematicians unable to help.

However, during the past few years statistics has made considerable inroads into school syllabuses at elementary and advanced level. In this respect, at any rate, mathematicians, scientists and social scientists appear to be in harmony on syllabus content, rather than at odds as they are over other recent trends.

But appearing to agree on general aims is one thing. Establishing a satisfactory and useful course is another. Teachers who have taken a substantial course in mathematical statistics sometimes find difficulty in applying their knowledge to the practical problems which are the concern of the user. Further, it is not always easy to make the transition from studying theoretical statistics as a mature student to communicating as a teacher elementary statistical ideas to younger pupils.

Any tendency to vacillate in the face of these difficulties may be halted by unfamiliar overtures within the staffroom from biologists and geographers facing new syllabuses. Most A-level geography syllabuses include work on the collection and analysis of statistical data—the Oxford syllabus (as revised several years ago) contains a particularly comprehensive list of statistical techniques with which students are expected to be familiar. In the field biology the new JMB syllabus (1976 onwards) makes a clear statement of the mathematical and statistical requirements of the biology course.

The pattern of developments arising from such inter-departmental

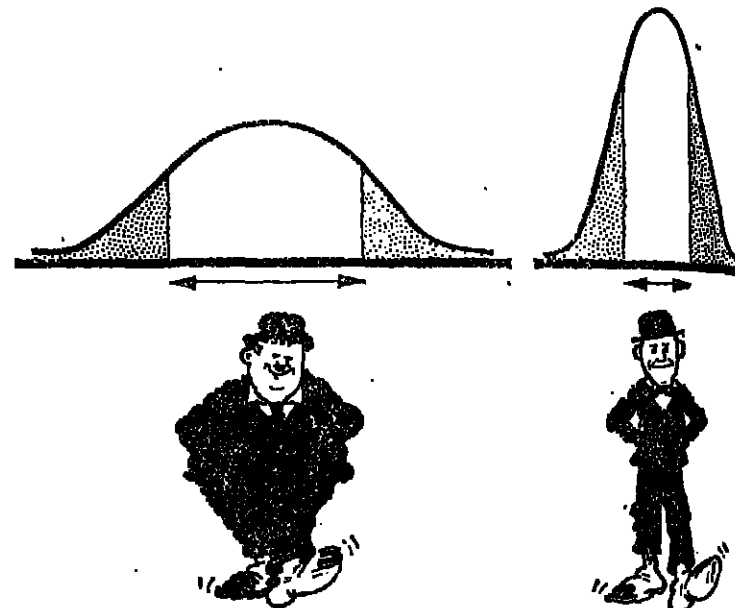


Figure 2

The original study which gave rise to the project ('Continuing Mathematics'—G. Howson and M. Erant—NCET) envisaged that certain mathematical topics, including statistics, would require particular attention from the project team. This prediction has been amply confirmed during the lifetime of the project when units of work on statistics have consistently been those in greatest demand.

To achieve a clearer picture of the statistical methods required, approaches have been made to the GCE examination boards, to science departments in colleges and universities, to lecturers and teachers and to various other individuals and institutions. While such an inquiry could not be expected to produce a consensus view, it certainly showed up the needs and interests of particular groups and provided background information on the many and varied conditions in which any statistics material might be used.

It was clear that it would be necessary to provide a variety of techniques for students with varying levels of maturity and commitment to studying the subject, within differing time allocations and in situations where the tutor might or might not be familiar with the content of the material.

In trying to come to terms with this complex brief, the team has prepared some 17 units of work on statistics. A unit is expected to occupy an average student for two to three hours and the relationship between the units developed so far is illustrated in the 'map' (Figure 1).

Topics named in rectangular boxes are the titles of CMP units; those in oval enclosures are assumed to have been provided in earlier courses. The map embodies several underlying principles in the team's thinking. In particular: ● There is a need for an elementary course in descriptive statistics which is appropriate for students starting statistics from scratch; the course should also clarify important ideas for students who are revising these elementary methods. However, as the amount of statistics in pre-sixth-form courses increases, it is expected that students will often be able to bypass this particular course.

● For the mature student requiring a substantial course in the basic distributions of statistical theory (e.g. the Binomial and Normal distributions) a good grounding in elementary probability is essential. For this reason the three-unit probability sequence is a pre-requisite for the full six-unit sequence in the two distributions previously mentioned.

● For the student with little time and/or little inclination towards mathematics, a less formal approach is desirable, which will give some degree of 'understanding' without encouraging the student to wield statistical tools with inappropriate data to produce misleading results.

After considerable thought, inquiry and heart-searching, it was decided to prepare a short course on hypothesis testing, approached via non-

The SMP: its raison d'être and future plans

Dr. Alan Rogerson, research director, explains the organization and purposes of what has become such an established institution that its rôle of radical innovation is sometimes forgotten

When the School Mathematics Project was established in 1961 it was a radical innovative project whose main objective was to improve mathematical education by providing more appropriate syllabuses, texts and examinations. Fourteen years later the SMP texts are now used in more than half the schools in England and Wales and the SMP is quoted in many people's minds with 'established modern mathematics'.

In some respects this limited conception of the present-day SMP work is misleading, since there has been no diminution in the original innovative spirit nor in the SMP's fundamental objectives. The SMP continues to be an independent curriculum development project organized by (and for) practising school-teachers, whose main task is the writing and testing of materials for classroom use. The SMP is not an official government or authority body, independent in this context meaning its freedom to make decisions and implement them.

Nor is the SMP in any sense a 'commercial' organization; it is established as an educational trust whose board of trustees, all intimately concerned with mathematics education, ensure that the overall work and finances of the SMP are properly and responsibly handled.

Curriculum development work in mathematics is the continuing *raison d'être* of the SMP and this is now fulfilled in an increasing number of ways. Ongoing work includes the revision of existing texts and materials, organizing summer in-service courses and numerous talks to help inform teachers, close liaison with the Oxford and Cambridge Examination Board who administer the SMP examinations and Cambridge University Press who publish most (but not all) SMP materials.

The administration involved is dealt with by two full-time staff with secretarial help, but the most important aspect of the SMP's work is accomplished by about 100 writers and advisers, all of whom are full-time classroom teachers or former classroom teachers. They are

usually organized into working parties or writing groups, each dealing with a particular task or problem. At present separate writing groups are preparing and testing materials for 14 to 16-year-old slow learners, remedial cards for 11 to 13-year-olds, booklets containing supplementary practice in manipulative skills work for the 11 to 16 age-range, an O level correspondence course in conjunction with the NEC and a booklet to help explain modern maths to science teachers.

In addition to these relatively limited objectives, there are also working parties at present engaged on the SMP seven to 8 work, some putting materials and a new A level physics course written jointly by physicists and mathematicians. The rapidly changing school situation, with possible common examining at 16-plus and CSE and N/F structure in the sixth form, means that new and more appropriate materials will be needed in the future. To help to meet these needs the SMP is about to set up new

working parties to look at the 14 to 16, and 16 to 18 age-ranges in particular.

Alongside the mainstream work of writing new materials, the SMP organizes working parties to look at other areas of importance in mathematical education. The best example of this is a tripartite working party involving the SMP, the Oxford and Cambridge Examination Board and the Southern Regional Examinations Board who are just completing their work on a feasibility study for common examining at 16-plus.

Another working party is at present reviewing the SMP further mathematics syllabus and preparing recommendations to be presented to the Oxford and Cambridge Examination Board. In addition we are hoping to set up a working party to consider the impact of electronic calculators on mathematics education, and have also had from time to time ad hoc meetings on matters such as in-service training, and maths/science liaison.

What does seem to have emerged from the last 14 years is that the materials and methods of working of the SMP has met with the approval of a large number of practising schoolteachers. The mathematical education of our pupils is a shared responsibility in which curriculum development projects and practising teachers have their part to play.

It is characteristic of English education that teachers have the freedom to choose how they teach and what they teach and it was this very freedom which led to the formation of the SMP in 1961.

-and how the KMP progresses

Bertram Banks, director of the project, talks about what he describes as 'a material-bank of tasks' and an assessment procedure that enables children to 'compete' against themselves

This term the Kent Maths Project is being used by more than 23,000 Key children in 370 schools involving about 370 teachers. It is not a mathematics course but a material-bank of tasks from which teachers can build up personal courses for pupils according to their needs, weaknesses and special interests.

The material-bank is organized into levels of mathematical difficulty and Level 1 contains tasks on topics expected to be mastered by an average nine-year-old. Level 8 is work at the highest O level grade, and the structured sequence of ascending spirals of concept-building and defined into appropriate levels.

Because the project has been developing for more than 10 years and is material subjected to rigorous validation through systems involving a large number of children and teachers, the positions of tasks in the hierarchy of concept-building are highly objective. This means that it is impossible for a pupil to cope with work in a particular level unless his mathematical ability has been developed to that level. It also means that a pupil working in, say, Level 6 is mathematically superior to a pupil working in Level 5, and it was the recognition of this that started the development of the KMP assessment procedure.

From the beginning, we have had a grand framework of levels and mathematics areas, into which tasks could be slotted as they became available. This framework is translated into an operational flow diagram which provides the teacher with information about worksheet page numbers, tapes and booklets. It also shows the position of each task in a concept-building structure. The children work on a matrix (or bundle) of up to 11 tasks at a time and when they complete a matrix, tests are taken on all the testable tasks. From the results of this test and knowledge of the pupil, the teacher, often in consultation with the child, makes up a new matrix, using the flow diagram as a guide.

It was an easy step to realizing that by averaging the levels of tasks on a matrix, an assessment of mathematical ability was obtained. This, average, called the level mean score, and, with the calculations were made to one decimal place. Two typical matrices would be as in Diagram 1, and the level mean would be 3.3 and 3.7.

The calculation of matrix level means, besides providing the teacher with an assessment score for each pupil, also interested the children. Many would work out the mean as if it was a new matrix as it was a new challenge and it was a new score. The teacher would be asked to work on a lower level, for

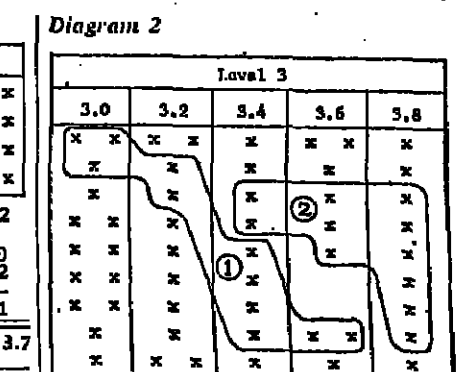
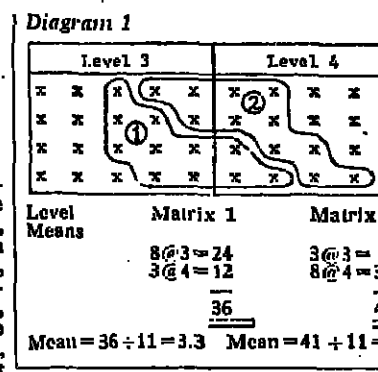
This, after all, is how good textbooks should proceed but with the flexible material-bank of the KMP, pupils can be given more work on a particular topic if they need it, but be looped forward if they master a topic easily. In this way, children are not expected to do work for which they are not ready, fast children are not held back, but all are learning on ascending spirals so are advancing successfully.

The idea of personal courses seems the only reasonable solution to mixed-ability learning in mathematics, and turns out to be just as ideally suited to mixed-aged grouping—on many occasions I have seen a first-year group with some fifth formers doing extra maths and all working happily with no extra problems for the teacher.

We think the KMP assessment system should be used to back-up

the present examination system. It has a long-term continuous assessment nature which is totally accepted by children. I am sure that other subjects could be organized along similar lines. After all, the SRA reading kit is already done and it should not be too difficult to devise a system in which children obtain an assessment score, moderated over a large population, for what they actually accomplish, to be combined with an examination result.

Without the fifth sub-division, the means of these two consecutive matrices would be 3.0.



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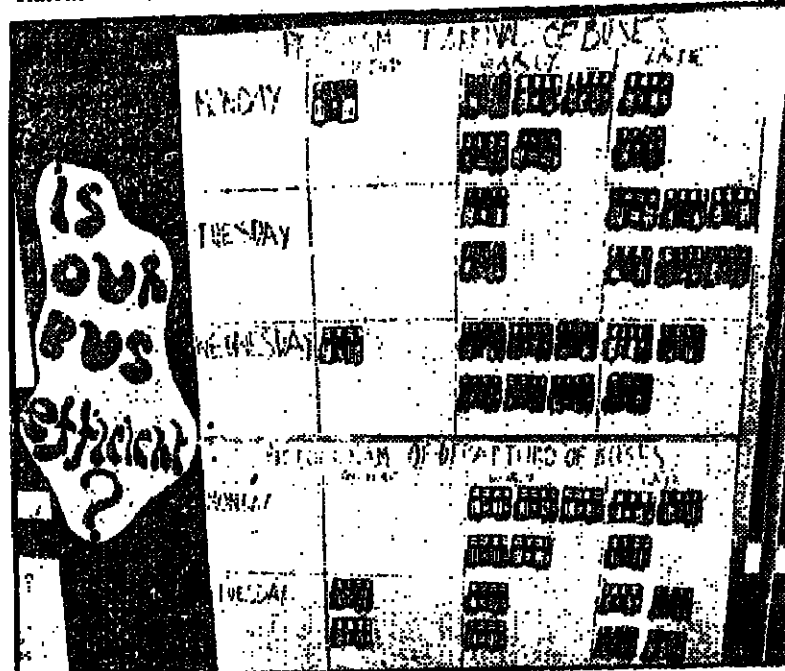
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—or putting the cart before the horse. By Julia Matthews, head of Thorntree (I and N) School, Charlton, London

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Using the urban environment. By Jo Stevens, ILFA district inspector, (mathematics)

Three major ways of using the environment emerged. One is the provision of life-like situations for practising particular mathematical techniques. Infant drawings of flats in Bursnaby gave rise to shape language, to counting and to simple calculations. Juniors in Southwark developed skills of surveying in a local park. Traffic sampling round the corner of a one-way

and another in SNEHRMS, which based their work on the children's experience of road construction. At the playground in Southwark, the children were able to do some work on porosity of different types of brick and on patterns in bricks. The work which was a useful way of using the environment in starting to develop other ideas began in school.

A third approach uses the

The work continues. In the next phase we plan to look at data on natural but important parts of the London environment, such as Regents Park Zoo where the vets are opening a teachers center for life studies this autumn. An early visit confirms its potential. "It has that network of regular paths been used for the roof here?" "What can you deduce from the daily record of admission for the last year?" "What problems arise from feeding the animals?" "What people?" "Are there flow problems at the Zoo?" "... and the tall is an elephant?"

Source: *Author's calculations*.



Piaget-type check on a seven-year-old's grasp of spatial order. He copies the teacher's "washing line"; then if successful puts his line in reverse order.

* *Progress records for children.* By Julia Mathews. Published Chambers/Murray, 1964. Pp. 100. 10s. 6d.

Maths without tears from BBC School Television. By David Rosecare, producer

Primary r

numbers



Frankenstein prepares his creation with the help of Igor. A scene from "Positively Not", one of the Mathshow programmes.

here—fell off the back of an audiovisual aids man's lorry. . . .
The tape recording breaks off at this point. One of the speakers expresses surprise that the tape is an open-ended teaching situation. The other seems to have gone stark staring mad.
 Seriously, the mathematical topics are:

Autumn 1975. Number sequence, measurement and accuracy, reflection, symmetry, division, angles.
Spring 1976. Geometrical patterning, probability, measurement, related numbers (Introduction of negative numbers), geometrical transformations.
Summer 1976. Probability, coordinates, area, perimeter, place value, place value.

Alive and doing well, writes John Dichmont, Nottingham University

matching rods; matching words

to tingle partition and subtraction

on

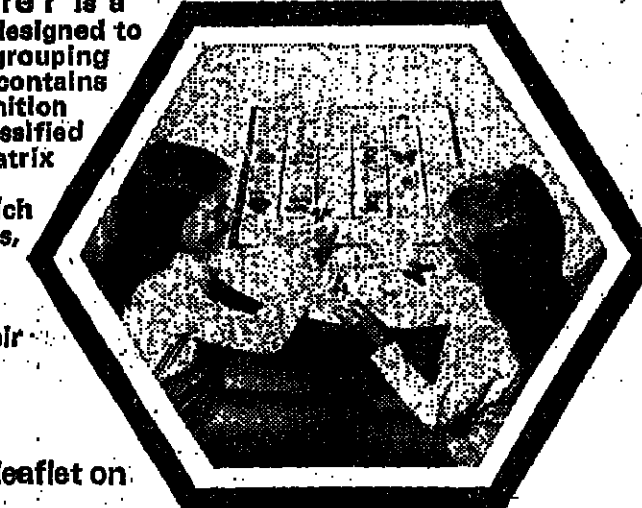


"That's how old I am". Helen and Suffron getting down to it

10-10-68

'What's in the Square?' is a

set of 10 matrix games designed to teach the logic skills of grouping and classifying. The set contains brightly coloured recognition cards that have to be classified and grouped, a P.V.C. matrix board and excellent Teacher's handbook which explains in full the games, the vocabulary and concepts that each is intended to develop and the reasoning behind their sequencing.



**For a free copy of the leaflet on
'What's In the Square?'
please complete the coupon
and post to**

**the Sales Office,
E. J. Arnold & Son Ltd.,
Butterley Street,
Leeds LS10 1AX.**

**Please send me a copy of the leaflet
"What's in the Square?"**

1. State of California

Name.....

School: _____

School

... ..

Address

TES 12

[illegible]

[illegible]

Journal of Management Education 30(6)p.789-804

Journal of Management Studies, 37(6), 809–826.

[illegible]

জাতি

WAKEFIELD (City of)
Metropolitan District Council
WELLSBORO HIGH SCHOOL

Stinnbridge Lane, Sandil, Waterfield
Telephone 80696

(13 to 16 mixed comprehensive school, B&I on roll)

Required for January, 1976, a TEACHER FOR HISTORY—Innovative teacher for Grades 7-8, Scale 2 post for suitable applicant.

Application forms to be returned as soon as possible and further details can be obtained from the Headmaster at the school.

THE HERTS EDUCATION AUTHORITY

**OUR LADY OF MERCY
GRANMAR SCHOOL**
(100 girls)
Required for January, 1976: —
Graduate Missions, to teach 1119
TORY to OTH and T. A. level
Scale 2.
Apply to The Headmistress, St.
John's Square, Wolverhampton
(phone Wolverhampton 424111).

**NUMBERSIDE
COUNTY COUNCIL
EDUCATION DEPARTMENT
KINGSTON UPON HULL DIVISION
KELVIN HALL HIGH SCHOOL
Bricknell Avenue, Kingston upon
Hull**
Hood, E. B. Atkinson, B.Sc.
Required for January, 1976.

[illegible]

GRAVESEND SCHOOL FOR GIRLS
Melham Road, Gravesend DAILY TELEGRAPH
Telephone (0474) 820996

(School Roll 600; Sixth Form 194)
Fully required for January
1967. GRADES FOR HISTORY/
ECONOMICS/GOVERNMENT. De-
partment, History, Economics and
British Government are taught to
C.O.E. Advanced Level, and non-
examinable courses for the Sixth
Form are provided in Current
Affairs, Economics, Politics and

WYNDGATE SECONDARY SCHOOL
 1000 N. 10th St., Oskosh, Wis.
 (Present Pop. 804)
 Founded Jan. 1874

to "O" Level in the Upper Right
or a combined History/Geography
syllabus in the Lower School.

Application: with full details
the headmaster as soon as possible.

**KENT
HED HILL SCHOOL.**

Books: a HISTORY SPECIALIST
taking intake, maladjusted boys
O and A levels.

Applicants must be prepared
take a full part in the work.

ASSISTANT MISTRESS to share the teaching of history throughout the school to Advanced and University Entrance.

ROTHESMIAN
(Metropolitan Borough of)
DEPARTMENT OF EDUCATION
MALTRAY COMPREHENSIVE
SCHOOL
11 to 18 mixed. Approximately
1,800 on roll, with 200 in Sixth

GRADUATE TEACHER for High School, Science 1.
School offers well established courses in "O" and "A" level and C.S.E. A special interest in non-examination papers would be an advantage. Pupils would be welcome. Possibility of promotion for a suitably qualified and experienced person.

Closing date: 17th October, 1976.
Application forms available from

Municipal Office Howard Street
Rotherham, Tol. Rotherham 0121
LAL 3497.

Application forms are obtainable from the headteacher and should be returned to him as soon as possible.

Humanities

Heads of Department

KENT
COUNTY COUNCIL
EDUCATION COMMITTEE
ASHFORD DIVISION
TENTERDEN HOMEWOOD SCHOOL
(Boys and Girls)
(Ref 920)
MASTER or MISTRESS, Head of
Department, Scale 4.

The Times Educational Supplement.

Source: Primary and Secondary Education Readership Survey, L. Harris, 1972

[illegible]

Heads of Department

HAMPSHIRE
MID-DIVISION AREA
AMHERST HILL SCHOOL
Amherst Hill, Allen Glen 2
11 to 14; computer
index: 1,160 on rolls

as soon as possible, a curriculum vitae and the names and addresses of two educational references. Assist with removal expenses in proved cases. Help with living may be available.

1976. Unless otherwise stated, all forms are obtainable from the Education Officer, Barnsley, by the dates given in parentheses).

COMPREHENSIVE

WYSTON, BARNSELEY

W.B.C.P.

School for pupils aged 11-16
 Comprehensive intake. In Ser-

ditional numbers major extensions have been planned and early next year, substantially qualified and experienced persons will be invited for the following:

Studies)

The holder of this key post will be concerned with curriculum development in all its aspects. It is hoped to appoint an energetic teacher with the vision necessary

ENDRAY, BARNESLEY
 kn
 ive-form entry 11-16 co-educational
 number on roll 880), is design-
 school.
 particular interest in Chemistry
 edmaster giving full curriculum

Second Master

The successful candidate, who should be a well qualified and experienced teacher, will take a full share

13. *... please see heading advertisement.*

**HOOOL
BARNESLEY
A.**

An experienced and suitably qualified teacher is required to organize and develop the department in the 11-15 years comprehensive school. The school has functioning courses to C.S.E. and 'O' level in language, literature and drama. An expansion of the

obtainable from and
 at the school (S.A.E.,
 SCHOOL
 HANSLEY
 ate
 al Education and
 ctivities

for a large and thriving department. The successful applicant will head a team of five specialist teachers in all aspects of physical education and will co-ordinate all extra-curricular activities within the school. The school has extensive playing fields and a heated

the head-giving full cur-
referees by October 10,

EY

LEEDS

BARCLAY

County of Cleveland

CLEVELAND EDUCATION COMMITTEE

SECONDARY TEACHING APPOINTMENTS

SCALE POSTS

BERTRAM RAMSEY SCHOOL, Marlon Road, Middlebrough, Cleveland TS4 3HX (Tel. Middlebrough 37284)
Required for January 1976, a teacher of HOME ECONOMICS, SCALE 1 post.
Bertram Ramsey is an 11-16 Comprehensive School with approximately 1,100 pupils on roll. Experience in CSE and 'O' level work an advantage but not essential.
BROOKSIDE SCHOOL, Marlon Road, Middlebrough, Cleveland TS4 3HY (Tel. Middlebrough 37280)
Required for January 1976, or earlier if possible, a teacher to be responsible for RELIGIOUS EDUCATION, throughout the school. An enthusiastic candidate is sought who would be prepared to make a lively contribution to the school as a whole, developing a soundly established subject. A SCALE 2 post is available for a suitable candidate. (Re-advertisement.)
Closing date 15th October 1975.
Financial assistance with household removal expenses is available in approved cases. Temporary housing accommodation may be available if required.
Application may be made by letter or on application forms available from the Head Teachers at the addresses shown above. Applications by letter should include detailed information regarding education, training, qualifications and experience, together with the names and addresses of three referees.
Letters of application and completed application forms should be submitted direct to the Head Teachers within 14 days of the appearance of this advertisement unless otherwise stated.

City of Manchester

EDUCATION COMMITTEE

Unless otherwise stated, all posts are available from January, 1976, and application forms together with further particulars are available from the Head of the School to whom they should be returned by 15th October, 1975.

SCALE 4

ST. JOSEPH'S HIGH SCHOOL FOR GIRLS, Linton Road, Victoria Park, Manchester M14 5SS.
Re-advertisement.
Required: HEAD OF MATHEMATICS.

ST. PIUS X BOYS' SECONDARY SCHOOL, Deane Road, Victoria Park, Manchester M14 5RX.
Re-advertisement.
Teacher for MUSIC throughout the school.
Up to a Scale 4 Post will be available for a suitable qualified and experienced candidate. Previous applicants will be considered and need not re-apply.

SCALE 2

HARPUREY HIGH SCHOOL, Upper School, Church Lane, Manchester M14 5LD.
Re-advertisement.
As soon as possible: a teacher (full or part-time) or an instructor for BORTHAM AND TYNDAL, Knowledge of Piano. Script would be an advantage. The school has a large, well equipped hall with removal expenses given in approved cases for permanent full-time appointments.

Metropolitan Borough of Stockport

EDUCATION DIVISION
Secondary
Required as soon as possible: a teacher for BORTHAM AND TYNDAL, Knowledge of Piano. Script would be an advantage. The school has a large, well equipped hall with removal expenses given in approved cases for permanent full-time appointments.

TEACHER OF FRENCH

Scale 1 (Rel. 43/TES)
To work mainly in the Lower School, although the timetable is negotiable. A junior trained teacher will be considered.

Marple Hall School, Hill Top Drive, Marple

TEACHER OF PHYSICS

Scale 1 (Rel. 45/TES)
A qualified teacher of Physics to assist in Physics and Combined Science required immediately for large, mixed 11-18 comprehensive. Combined Science is taught to the 1st and 2nd years and then the traditional sciences are taught to G.C.E. 'O' and 'A' levels. Engineering science is also offered to 'A' level.

Required for November, 1975:
Reddish Vale School, Reddish Vale Road, Stockport

TEACHER OF PHYSICS

Scale 1 (Rel. 61/TES)
To teach a wide variety of courses including O.S.E. 'O' and 'A' level. Physics, to share in the Lower School Combined Science teaching and to teach Integrated Modular Courses to the Upper School.

Application forms from the Director of Education, 7000 Hall, Stockport (returning the reference number) and returned to the Headteacher of the school by 15th October, 1975.

SECONDARY

Scale 2 Posts

continued

CITY OF SALFORD

EDUCATION DEPARTMENT

(Re-advertisement)

CHANDLER PARK HIGH SCHOOL, Salford, Greater Manchester M6 6JH (11 to 16 Comprehensive, 1,200 pupils)

Required for 1st January, 1976, a teacher of HOME ECONOMICS, SCALE 2 post.

Chandler Park is an 11-16 Comprehensive School with approximately 1,200 pupils on roll. Experience in CSE and 'O' level work an advantage but not essential.

BROOKSIDE SCHOOL, Marlon Road, Middlebrough, Cleveland TS4 3HY (Tel. Middlebrough 37280)

Required for January 1976, or earlier if possible, a teacher to be responsible for RELIGIOUS EDUCATION, throughout the school. An enthusiastic candidate is sought who would be prepared to make a lively contribution to the school as a whole, developing a soundly established subject. A SCALE 2 post is available for a suitable candidate. (Re-advertisement.)

Closing date 15th October 1975.

Financial assistance with household removal expenses is available in approved cases. Temporary housing accommodation may be available if required.

Application may be made by letter or on application forms available from the Head Teachers at the addresses shown above. Applications by letter should include detailed information regarding education, training, qualifications and experience, together with the names and addresses of three referees.

Letters of application and completed application forms should be submitted direct to the Head Teachers within 14 days of the appearance of this advertisement unless otherwise stated.

SANDWELL

Interpretation through a

teacher of French, to assist in

French and Combined Science

required for January 1976, or

earlier if possible, a teacher to

be responsible for RELIGIOUS

EDUCATION, throughout the

school. An enthusiastic candidate

is sought who would be prepared

to make a lively contribution to

the school as a whole, developing

a soundly established subject. A

SCALE 2 post is available for a

suitable candidate. (Re-advertisement.)

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ST. JOSEPH'S HIGH SCHOOL FOR GIRLS, Linton Road, Victoria Park, Manchester M14 5SS.

Re-advertisement.

Required: HEAD OF MATHEMATICS.

ST. PIUS X BOYS' SECONDARY SCHOOL, Deane Road, Victoria Park, Manchester M14 5RX.

Re-advertisement.

Teacher for MUSIC throughout the school.

Up to a Scale 4 Post will be available for a suitable qualified and experienced candidate. Previous applicants will be considered and need not re-apply.

HARPUREY HIGH SCHOOL, Upper School, Church Lane, Manchester M14 5LD.

Re-advertisement.

As soon as possible: a teacher (full or part-time) or an instructor for BORTHAM AND TYNDAL, Knowledge of Piano. Script would be an advantage. The school has a large, well equipped hall with removal expenses given in approved cases for permanent full-time appointments.

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Re-advertisement.

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Re-advertisement.

Required: HEAD OF MATHEMATICS.

ST. PIUS X BOYS' SECONDARY SCHOOL, Deane Road, Victoria Park, Manchester M14 5RX.

Re-advertisement.

Teacher for MUSIC throughout the school.

Junior (Sixth Form) Colleges

Scale 1 Posts

CITY OF SALFORD

EDUCATION DEPARTMENT

(Re-advertisement)

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Re-advertisement.

Required: HEAD OF MATHEMATICS.

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Re-advertisement.

Teacher for MUSIC throughout the school.

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Re-advertisement.

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BORDERS REGIONAL COUNCIL

SECONDARY SCHOOLS

Promoted Posts

Principal Teacher Mathematics

Peebles High School (phone Peebles 20201)

Roll 920. Responsibility payment £1,182

Principal Teacher of Music

Kelso High School (phone Kelso 2444)

Roll 800. Responsibility payment £1,032

Closing date for applications 15 October, 1975.

Sympathetic consideration will be given to the housing needs of applicants.

Applications are invited from suitably qualified registered teachers for the above posts.

Application forms may be obtained from the Human Resources and Management Services, Regional Office, Newtown St. Boswells TD6 0SA. Completed forms of application should be returned to the Director of Education at this address.

BUCKINGHAMSHIRE

MILTON KEYNES DIVISION

WOLVERHAMPTON SCHOOL

Wolverhampton

Wolverhampton

Wolverhampton

Wolverhampton

Wolverhampton

Wolverhampton

Wolverhampton

Wolverhampton

Wolverhampton

Wolverhampton

Wolverhampton

INDEPENDENT
Other Appointments continued

W. S. has vacancies in good independent schools for deputy head and 2 to staff departments. 72, Winton Road, London, W.13.

YOUNG resident qualified teacher experienced with modern techniques to teach general studies, English, maths and science. Salary £4,000-£4,500. Apply to Mrs. J. W. Young, 10, Winton Road, Winton, Wiltshire.

Preparatory Schools

By Subject
Classification

Art and Design

LONDON
ART AND CRAFT ASSISTANT TEACHER required to assist in the teaching of boys aged 11-13. Apply to the Headmaster, 10, Winton Road, Winton, Wiltshire.

English

SHIRESBURY
PACRWOOD HAZARD
PACRWOOD HAZARD
PACRWOOD HAZARD

Geography

HAMPSHIRE
REQUIREMENT January for Geography to teach in a school. Apply to the Headmaster, 10, Winton Road, Winton, Wiltshire.

Mathematics

GLASGOW
REQUIREMENT January for Mathematics to teach in a school. Apply to the Headmaster, 10, Winton Road, Winton, Wiltshire.

WINCHESTER
THE MILTON SCHOOL

REQUIREMENT January for Mathematics to teach in a school. Apply to the Headmaster, 10, Winton Road, Winton, Wiltshire.

Modern Languages

STAFFORDSHIRE
PACRWOOD HAZARD

REQUIREMENT January for French to teach in a school. Apply to the Headmaster, 10, Winton Road, Winton, Wiltshire.

Music

REQUIREMENT January for Music to teach in a school. Apply to the Headmaster, 10, Winton Road, Winton, Wiltshire.

Religious Education

REQUIREMENT January for Religious Education to teach in a school. Apply to the Headmaster, 10, Winton Road, Winton, Wiltshire.

Science

REQUIREMENT January for Science to teach in a school. Apply to the Headmaster, 10, Winton Road, Winton, Wiltshire.

Other than by Subject
Classification

BRISTOL
COLSTON'S PREPARATORY SCHOOL

REQUIREMENT January for Mathematics to teach in a school. Apply to the Headmaster, 10, Winton Road, Winton, Wiltshire.

Colleges of Further Education

REQUIREMENT January for Mathematics to teach in a school. Apply to the Headmaster, 10, Winton Road, Winton, Wiltshire.

Directors and Principals

REQUIREMENT January for Mathematics to teach in a school. Apply to the Headmaster, 10, Winton Road, Winton, Wiltshire.

Heads of Department

REQUIREMENT January for Mathematics to teach in a school. Apply to the Headmaster, 10, Winton Road, Winton, Wiltshire.

LONDON, N.6
CHANNING SCHOOL

REQUIREMENT January for Mathematics to teach in a school. Apply to the Headmaster, 10, Winton Road, Winton, Wiltshire.

LONDON, W.2
WITCHAMPTON SCHOOL

REQUIREMENT January for Mathematics to teach in a school. Apply to the Headmaster, 10, Winton Road, Winton, Wiltshire.

OXFORD
HOLINGDON SCHOOL

REQUIREMENT January for Mathematics to teach in a school. Apply to the Headmaster, 10, Winton Road, Winton, Wiltshire.

SURREY
HOLINGDON SCHOOL

REQUIREMENT January for Mathematics to teach in a school. Apply to the Headmaster, 10, Winton Road, Winton, Wiltshire.

BUCKINGHAMSHIRE
COUNTY COUNCIL

REQUIREMENT January for Mathematics to teach in a school. Apply to the Headmaster, 10, Winton Road, Winton, Wiltshire.

BUCKINGHAMSHIRE
COUNTY COUNCIL

REQUIREMENT January for Mathematics to teach in a school. Apply to the Headmaster, 10, Winton Road, Winton, Wiltshire.

BATH
NORTH BATH SCHOOL

REQUIREMENT January for Mathematics to teach in a school. Apply to the Headmaster, 10, Winton Road, Winton, Wiltshire.

BRISTOL
CLIFTON SCHOOL

REQUIREMENT January for Mathematics to teach in a school. Apply to the Headmaster, 10, Winton Road, Winton, Wiltshire.

BRISTOL
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Lancashire Education Committee
BLACKBURN COLLEGE OF TECHNOLOGY AND DESIGN
Feilden Street, Blackburn

PRINCIPAL LECTURER in MANAGEMENT STUDIES
To be effective 1 January, 1976

To work with D.M.S. and other management courses and to be responsible for D.M.S. administration. Applicants should have appropriate educational experience and hold high graduate and/or professional qualifications in the fields of General Management/Business Policy or Financial/Qualitative Aspects.

Salary Scale: Principal Lecturer: £5,940-£8,642
Further details and application forms from the Principal—completed forms to be returned within ten days.

ESSEX COUNTY COUNCIL
BLACKBURN COLLEGE OF TECHNOLOGY AND DESIGN
Feilden Street, Blackburn

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MINISTRY OF DEFENCE
(AIR FORCE DEPARTMENT)

QUALIFIED TEACHERS

Applications are invited for two teaching posts with the United States Dependents' Schools Organisation at their schools at Lakenheath, Suffolk.

Candidates must be experienced teachers, able to provide leadership in the school community and with the necessary versatility to meet challenging situations.

British salary, in accordance with current scales, will be structured on experience and responsibility.

Teachers will be required to be in post by 1 January 1976.

School terms and annual leave will be in accordance with the American School year.

Requests for application forms should be addressed to:

Head of Central British Staff Organization, Building 501, RAF Mildenhall, Bury St. Edmunds, Suffolk IP28 8ND. Telephone: Mildenhall 712511 (STD 0838) Extension 2230.

Applicants whose qualifications and experience merit consideration will be invited to attend an interview at Lakenheath. Travelling expenses at Public Transport rates will be refunded.

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THE TIMES
LITERARY SUPPLEMENT
On sale at newsagents today, price 15p

UNIVERSITY OF EXETER

Chair of French

Applications are invited for a Chair of French, tenable from 1 October, 1976. Salary will be on the agreed professorial range; for October, 1975, minimum £7,501, average £8,884 p.a. (cost-of-living adjustment at present under negotiation).

Further particulars may be obtained from the Vice-Chancellor, University of Exeter, Northcott House, The Queen's Drive, Exeter EX4 4QJ, to whom applications (13 copies, overseas candidates 1 copy) should be forwarded so as to reach him not later than 20 November, 1975. Please quote ref 1/10/3111.

**ROBERT GORDON'S
INSTITUTE OF TECHNOLOGY**
SCHOOL OF HOTEL AND
INSTITUTIONAL ADMINISTRATION
Lecturer in
Food Production

For Professional Cookery and related theory in Higher National Diploma in Institutional Management and in Catering and Hotelkeeping. Appropriate experience and qualifications essential.

Lecturer in
Accommodation Services

for Higher National Diploma in Institutional Management and the Higher National Diploma in Catering and Hotelkeeping. At least three years' accommodation administration experience and corporate membership of the HCIMA by examination or degree in Hotel and Catering Management required. Removal expenses assistance.

Salary Scale: £3,216-£6,495

Details from Director,
Robert Gordon's Institute of Technology,
Schoolhill, Aberdeen AB9 1FR.

BOROUGH OF SUNDERLAND
EDUCATION AUTHORITYWEARSLIDE COLLEGE OF
FURTHER EDUCATION

Applications are invited from suitably qualified persons for appointment to the following full-time posts to commence duties as soon as possible:

Department of Building

Lecturer I (Two posts)—Brickwork

The person appointed will be required to teach on craft courses.

Department of Electrical, Mathematics and
MiningLecturer I for Electrical Craft
Courses

Department of Mechanical Engineering

Lecturer I (Two posts)—Welding

The person appointed will be required to teach Welding Engineering, to craft studies and Shipbuilding Courses.

Department of Naval Architecture and
Shipbuilding

Lecturer I in Thick Plate Fabrication

Salaries will be in accordance with Bupham Technical Scale.

Lecturer I £2,469-£4,377

Starting point dependent upon experience and qualifications.

Further particulars and application forms for the above posts may be obtained from the Principal, Wearside College of Further Education, Sea View Road West, Sunderland SR2 8LN. Completed application forms should be forwarded to the Principal before the closing date of 10th October, 1975.

COLLEGES OF
FURTHER EDUCATION
continuedCITY OF MANCHESTER
EDUCATION COMMITTEEST JOHN'S COLLEGE OF
FURTHER EDUCATION

LECTURER in MATHEMATICS: Two posts in MATHEMATICS, Level 1 and Level 2. The ability to offer computer applications and to teach additional mathematics will be an advantage. Applications should be sent to the Principal, St John's College of Further Education, 100, Market Street, Manchester M2 1PL. Salary scale £2,469 to £4,377. Closing date 10th October, 1975.

Further particulars and application forms may be obtained from the Principal, St John's College of Further Education, 100, Market Street, Manchester M2 1PL. Salary scale £2,469 to £4,377. Closing date 10th October, 1975.

MIDDLESEX
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COUNCILColleges and
Departments of ArtHAMPSHIRE
EDUCATION COMMITTEE

LECTURER in FASHION DESIGN: Two posts in FASHION DESIGN, Level 1 and Level 2. The ability to offer computer applications and to teach additional mathematics will be an advantage. Applications should be sent to the Principal, Hampshire College of Further Education, 100, Market Street, Manchester M2 1PL. Salary scale £2,469 to £4,377. Closing date 10th October, 1975.

Further particulars and application forms may be obtained from the Principal, Hampshire College of Further Education, 100, Market Street, Manchester M2 1PL. Salary scale £2,469 to £4,377. Closing date 10th October, 1975.

LONDON, G.E.S.
EDUCATION COMMITTEE

LECTURER in FASHION DESIGN: Two posts in FASHION DESIGN, Level 1 and Level 2. The ability to offer computer applications and to teach additional mathematics will be an advantage. Applications should be sent to the Principal, London G.E.S. Education Committee, 100, Market Street, Manchester M2 1PL. Salary scale £2,469 to £4,377. Closing date 10th October, 1975.

Further particulars and application forms may be obtained from the Principal, London G.E.S. Education Committee, 100, Market Street, Manchester M2 1PL. Salary scale £2,469 to £4,377. Closing date 10th October, 1975.

NORTH YORKSHIRE
EDUCATION COMMITTEE

LECTURER in FASHION DESIGN: Two posts in FASHION DESIGN, Level 1 and Level 2. The ability to offer computer applications and to teach additional mathematics will be an advantage. Applications should be sent to the Principal, North Yorkshire Education Committee, 100, Market Street, Manchester M2 1PL. Salary scale £2,469 to £4,377. Closing date 10th October, 1975.

Further particulars and application forms may be obtained from the Principal, North Yorkshire Education Committee, 100, Market Street, Manchester M2 1PL. Salary scale £2,469 to £4,377. Closing date 10th October, 1975.

SALOP
COUNCIL

LECTURER in FASHION DESIGN: Two posts in FASHION DESIGN, Level 1 and Level 2. The ability to offer computer applications and to teach additional mathematics will be an advantage. Applications should be sent to the Principal, Salop Council, 100, Market Street, Manchester M2 1PL. Salary scale £2,469 to £4,377. Closing date 10th October, 1975.

Further particulars and application forms may be obtained from the Principal, Salop Council, 100, Market Street, Manchester M2 1PL. Salary scale £2,469 to £4,377. Closing date 10th October, 1975.

STAFFORDSHIRE
EDUCATION COMMITTEE

LECTURER in FASHION DESIGN: Two posts in FASHION DESIGN, Level 1 and Level 2. The ability to offer computer applications and to teach additional mathematics will be an advantage. Applications should be sent to the Principal, Staffordshire Education Committee, 100, Market Street, Manchester M2 1PL. Salary scale £2,469 to £4,377. Closing date 10th October, 1975.

Further particulars and application forms may be obtained from the Principal, Staffordshire Education Committee, 100, Market Street, Manchester M2 1PL. Salary scale £2,469 to £4,377. Closing date 10th October, 1975.

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COUNCILBLACKPOOL COLLEGE OF TECHNOLOGY AND ART
Ashfield Road, Bispham, BlackpoolFACULTY OF CONSTRUCTION AND
ENGINEERING

LECTURERS

HEATING AND VENTILATING GRADE II

QUANTITY SURVEYING GRADE II

FABRICATION; MACHINE SHOP
ENGINEERING; AND ELECTRICAL
INSTALLATION GRADE I

Applicants should be fully skilled in their trade and hold an appropriate City & Guilds or higher qualification. In-service training in teaching techniques available.

Salaries: Grade II £3,720-£5,493
Grade I £2,469-£4,377

Entry point according to qualifications and experience. Apply to Principal for application form and further details.

HAMPSHIRE EDUCATION AUTHORITY

Highbury
Technical
College

Department of Construction

Principal
Lecturer

Applicants should be well qualified and suitably experienced graduates with professional qualifications. The position is that of Deputy Head in a Grade IV Department, which offers a wide range of courses in construction and environmental health. Salary £5,940 to £8,642 p.a.

Application forms and further details from: The Secretary, Highbury Technical College, Gosham, Portsmouth PO6 2SA (Gosham 83131 ext. 247).

METROPOLITAN
BOROUGH OF
BURY

Unless otherwise stated, forms of application are obtainable from and returnable to the Director of Education, Almsdown House, Market Street, Bury, by the dates indicated.

RADCLIFFE COLLEGE OF FURTHER EDUCATION

LECTURER GRADE 1

To teach accommodation operations to full-time catering students (C.G.I. 705).

Applicants should possess appropriate qualifications and wide trade experience. Further training would be an advantage.

LECTURERS GRADE 1 (2 POSTS)

Required in Commerce Section to teach shorthand to 2nd year Secretarial students and typewriting to 1st year students.

Applicants should be able to offer other allied subjects from the following: Commerce, Business Calculations, Office Practice, English.

Applicants should possess appropriate qualifications and wide trade experience. Further training would be an advantage.

Closing date 11th October, 1975 (4548).

COMMERCIAL SUBJECTS
TEACHER (SCALE 1)

Forms of application obtainable from and returnable to the Headteacher at the school by 17th October, 1975.

ST. THOMAS'S C.E. PRIMARY SCHOOL

TEACHER (SCALE 2) FOR MUSIC

Closing date 17th October, 1975.

INSTRUMENTAL TEACHING SERVICE

HEAD OF DEPARTMENT OF
STRINGS—(SCALE 3)

Qualified Teacher to co-ordinate all string teaching within the Authority's Schools.

TEACHER (SCALE 2) OR
INSTRUCTOR

Qualified Teacher for instrumentalists not recognised as qualified teachers.

Hull College of Commerce

Lectureship vacancies

Commercial Studies Department
LECTURER GRADE I or II

In General Commercial Subjects, able to teach a selection from Accounts, Calculation, Clerical Duties, Commerce, Economics, Law and Office Practice up to the level of the Ordinary National Certificate/Diploma in Business Studies.

Please refer to this advertisement when writing for further particulars and an application form. Completed forms should be returned within 14 days of the appearance of this advertisement.

The Principal
College of Commerce
Queens Gardens
HULL HU1 3DH



LEIGH TECHNICAL COLLEGE

Commerce and General Studies
Department

CRAIGIE COLLEGE OF EDUCATION AYR

VICE-PRINCIPAL

Applications are invited from appropriately qualified and experienced graduates for the post of Vice-Principal which will become vacant on 31 December, 1975, as a result of the promotion of the present holder.

Applicants must have a varied experience in education: in particular, experience in a university, college of education, or at a responsible level in school or educational administration is desirable.

The salary for the post is at present £8,352, but after review is expected to be in the region of £10,000.

Additional information, conditions of service and application forms may be obtained from the Secretary, Craigie College of Education, Ayr KA8 0SR, to whom completed application forms should be returned by MONDAY, 20 OCTOBER, 1975.

ATHROFA GOGLEDD-Dd CYMRU

North E Wales Institute for higher education

Clwyd

Applications are invited for the following important appointments in this Institute incorporating Aston College, Catterle College and Kelsterton College:

Head of the school of Social Science (Grade V)

Principal Lecturer in Music

Principal Lecturer in Social Work

Salaries in accordance with Burnham Regulations. Application forms and further details from: Dean of Administration, North E Wales Institute, Kelsterton College, Connah's Quay, Clwyd.

Northumberland COLLEGE OF EDUCATION

Appointment of PRINCIPAL

Applications are invited from persons with suitable qualifications and experience for the post of PRINCIPAL which will become vacant on 31st August, 1976, on the retirement of the present Principal, Miss Eileen M. Churchill, M.A.

The College will continue to be maintained by the Northumberland County Council as a major institution for the education and training of teachers. It is expected that diversified courses will also be provided from September, 1978.

The salary will be fixed at the appropriate point in Group 6 of the Pelham range of salaries for Principals. The appointment will date from 1st September, 1976.

Further particulars and application forms may be obtained from The Clerk to the Governors, Northumberland College of Education, Ponteland, Newcastle upon Tyne, NE20 0AB, to whom completed forms should be returned by 27th October, 1975.

UNIVERSITIES Appointments continued

SILVER LEASE

THE UNIVERSITY OF SHEFFIELD is seeking applications for the post of Lecturer in the Department of Education. The post is at the level of Lecturer Grade 1, with a salary of £8,352 per annum. The successful candidate will be responsible for the delivery of lectures and seminars, and for the supervision of students. The post is full-time and requires a minimum of five years' experience in higher education. Applications should be sent to the Secretary, Department of Education, University of Sheffield, Sheffield S10 2TN, by 15th November 1975.

THE ASSOCIATION OF COMMONWEALTH UNIVERSITIES

Applications are invited for the post of Lecturer in the Department of Education. The post is at the level of Lecturer Grade 1, with a salary of £8,352 per annum. The successful candidate will be responsible for the delivery of lectures and seminars, and for the supervision of students. The post is full-time and requires a minimum of five years' experience in higher education. Applications should be sent to the Secretary, Association of Commonwealth Universities, 11, Bedford Square, London WC1R 4EJ, by 15th November 1975.

Fellowships Studentships and Research Awards

BIRMINGHAM

THE UNIVERSITY OF BIRMINGHAM is offering a number of fellowships and studentships for research in the field of Education. The awards are for periods of up to two years and are available to both British and foreign students. Applications should be sent to the Secretary, Department of Education, University of Birmingham, Birmingham B15 2TT, by 15th November 1975.

CLYDE

THE UNIVERSITY OF GLASGOW is offering a number of fellowships and studentships for research in the field of Education. The awards are for periods of up to two years and are available to both British and foreign students. Applications should be sent to the Secretary, Department of Education, University of Glasgow, Glasgow G12 8QQ, by 15th November 1975.

London Borough of Enfield TEACHER

In either

(A) General Subjects or

(B) Handicraft (Including woodwork and metalwork) and some general teaching as required.

required at St. Nicholas House Community Home, an observation and assessment centre for 30 boys aged 11-17 years.

To be involved in observing, testing and reporting as a member of a Specialist Team concerned with assessment. This post may be resident or non-resident. (£281 p.a. London Weighting payable if non-resident). Salary is within the Burnham Scale 2, plus a special responsibility allowance of £584 p.a.

If non-resident, generous assistance towards relocation costs, temporary housing accommodation for up to two years, £10 per week lodging allowance (up to four months) in certain cases. Mortgage facilities (temporarily suspended subject to funds being available). 100% removal expenses.

Further particulars and application forms may be obtained from The Clerk to the Governors, Northumberland College of Education, Ponteland, Newcastle upon Tyne, NE20 0AB, to whom completed forms should be returned by 27th October, 1975.

ST. MARY'S COLLEGE, STRAWBERRY HILL, TWICKENHAM TW1 4XZ

Principal: The Very Reverend T. P. Cashin, C.M., B.A.

Applications are invited for the following posts:

Lecturer in Sociology

required for 1st January, 1976. Courses are offered in this Main Subject department to Certificate, B.Sc. and B.Ed. students, and candidates should be able to contribute substantially to these. Experience of Social Science teaching in schools would be an advantage.

Lecturer in Psychology

must be highly qualified, to join team teaching Psychology on 4 courses—Teacher's Certificate, B.Ed. (Ordinary or Honours), B.Sc. (London External) and New Unit States Joint B.Sc. Degree.

This is NOT an Educational Psychology appointment, is applicant interested in experimental psychology is sought, but please state other fields of interest.

The salary for each of these posts will be in accordance with the Pelham Scales plus London Weighting allowance.

Applications should be sent to the Principal, by the 15th October 1975, and should include the names of three referees. (There are no special application forms).

ATHROFA GOGLEDD-Dd CYMRU

North E Wales Institute for higher education

Clwyd

Aston College Wrexham

Lecturer 1

required to teach CGLI Sheet Metal and Thin Plate Craft Studies up to CGLI final grade. Ability to teach Working Technology an advantage.

Applicants should have served an appropriate apprenticeship, and should have a relevant CGLI final certificate and industrial experience.

Further details and an application form from The Registrar, North E Wales Institute, Aston College, Mold Road, Wrexham.

WESTHILL COLLEGE OF EDUCATION

Selly Oak, Birmingham, B29 6LL

Principal: Alan G. Bamford, M.Ed.

LECTURER IN EDUCATION (Special Education)

Applications are invited for appointment as Lecturer in Education with special reference to the education of severely mentally handicapped children. The successful candidate will be a member of a team who have responsibility for the initial training courses (i.e. both Certificate and B.Ed. with a new Main Subject course in Special Education Subnormally in B.Ed. from 1978), a full-time advanced Diploma course, for qualified teachers, and in-service courses. Candidates should have good academic qualifications in the appropriate field of special education, psychology and experience of severely mentally handicapped children. It is hoped to make an appointment with effect from 1st January, 1978, or as soon as possible thereafter.

Applications should be made as soon as possible to the Principal from whom further information may be obtained. Salary will be in accordance with the Pelham Scale 2, plus London Weighting allowance.

Shropshire Education Committee

STOKE HEATH BORSTAL LECTURER I

Required from 1st January, 1978, or as soon as possible after that date.

To teach English to 'O' Level and to assist with remedial work and Personal Relationship Courses. The successful applicant will be a qualified teacher preferably with experience of working with young men in their late teens.

Send S.A.E. for application forms and further details to: County Education Officer, Further Section, Shirehall, Abbey Foregate, SHREWSBURY, Salop.

Bedfordshire ADULT EDUCATION

ELSTOW CRAFT CENTRE

LECTURER-IN-CHARGE

ELSTOW CRAFT CENTRE, near Bedford

Salary: Further Education Lecturer Grade II, £3,279-£5,483

The holder of this post will work in close cooperation with the County General Adviser (Home Economics). The Centre provides day-time and evening classes in a number of subjects as well as social and recreational activities for the various women's organizations in the county.

The person appointed would be expected to join a team of Adult Education Officers which at present numbers 14 to contribute towards the development of Adult Education within the County area as a whole.

Further particulars from: D. P. J. Browning, M.A., Chief Education Officer, County Hall, Bedford (Tel. FEAR), 1076.

Closing date for the receipt of applications 17th October, 1975.

HERTFORDSHIRE COUNTY COUNCIL

SOCIAL SERVICES

DEPUTY PRINCIPAL

SALARY £4,755-£5,918 p.a.

Plethobury School, Sawbridgeworth

Plethobury is a community home with education on the premises accommodating up to 70 boys aged 11-18 years. Applications are invited from qualified social workers or teachers who have had substantial experience at a Senior level.

The person appointed will be expected to participate in all aspects of life in the School. Particular emphasis will be placed on meeting the social and emotional needs of the boys through the development of group living.

Further details and informal interviews by telephoning Hatfield 54242 extension 5275. Please quote reference B.25.

DOMESTIC BURSAR

NJC Grade 4 Scale £2,807-£3,098 plus £120 p.a. fringe allowance if non-resident

Crouchford Community School

Chapmore End, near Ware, Herts.

Crouchford is a community home with education on the premises for 70 boys aged from 15-18 years. Boys come from a variety of backgrounds, are in the care of the Local Authority and present a range of interesting challenges to those responsible for their care.

The person appointed will have a senior level of responsibility for the management of domestic organisation and welfare in the school. She should be capable of maintaining high standards in catering, health and hygiene and giving support to professional and auxiliary staff. The school is situated in attractive surroundings within easy reach of London. The post may be resident or non-resident, however, a semi-detached house is available if required. Alternative accommodation for a non-resident person can also be arranged.

Further details and informal interviews by telephoning the Principal, Mr. G. Mercer at Ware 5421. Please quote reference B.25.

Application forms from Director of Social Services, County Hall, Hatfield, telephone Hatfield 54242, extension 5448. Closing date 20th October, 1975.

Work with older Adolescents

COMMUNITY SCHOOL

An Art and Craft Teacher is required at St. John's School, Apethorpe, a Community School for 70 boys aged 15-18 yrs. As an ex-approved School, it accommodates a high proportion of delinquent and deprived children and art therapy is considered by the school to make an important contribution to the treatment of the boys.

In addition to specialising in Art, Craft and Pottery, with boys of school age and beyond, he or she will be expected to teach general subjects and assist with outward bound activities.

The School itself is set in 52 acres of beautiful countryside and has its own gymnasium, sports hall and swimming pool.

Mr. Lampard, the Headmaster, would be pleased to hear from those wishing more information or an informal visit to the School (Tel. Kings Cliffe 283).

SALARY: BURNHAM BASIC GRADE PLUS EXTRA RESIDUS DUTY ALLOWANCE (£16 hours weekly) £279 p.a.

APPROVED SCHOOL ALLOWANCE £584 p.a.

HOLIDAY: 8 weeks annually

Application forms from the Personnel Officer, County Secretary's Dept., County Hall, George Row, Northampton.

COLLEGES OF EDUCATION continued

ESSEX

UNIVERSITY COLLEGE OF EDUCATION, Chelmsford, Essex, is seeking applications for the post of Lecturer in the Department of Education. The post is at the level of Lecturer Grade 1, with a salary of £8,352 per annum. The successful candidate will be responsible for the delivery of lectures and seminars, and for the supervision of students. The post is full-time and requires a minimum of five years' experience in higher education. Applications should be sent to the Secretary, Department of Education, University of Chelmsford, Chelmsford, Essex, by 15th November 1975.

LONDON, W.4

HARRISON COLLEGE OF EDUCATION, London W.4, is seeking applications for the post of Lecturer in the Department of Education. The post is at the level of Lecturer Grade 1, with a salary of £8,352 per annum. The successful candidate will be responsible for the delivery of lectures and seminars, and for the supervision of students. The post is full-time and requires a minimum of five years' experience in higher education. Applications should be sent to the Secretary, Department of Education, Harrison College, London W.4, by 15th November 1975.

HERTFORDSHIRE COUNTY COUNCIL

SOCIAL SERVICES

DEPUTY PRINCIPAL

SALARY £4,755-£5,918 p.a.

Plethobury School, Sawbridgeworth

Plethobury is a community home with education on the premises accommodating up to 70 boys aged 11-18 years. Applications are invited from qualified social workers or teachers who have had substantial experience at a Senior level.

The person appointed will be expected to participate in all aspects of life in the School. Particular emphasis will be placed on meeting the social and emotional needs of the boys through the development of group living.

Further details and informal interviews by telephoning Hatfield 54242 extension 5275. Please quote reference B.25.

DOMESTIC BURSAR

NJC Grade 4 Scale £2,807-£3,098 plus £120 p.a. fringe allowance if non-resident

Crouchford Community School

Chapmore End, near Ware, Herts.

Crouchford is a community home with education on the premises for 70 boys aged from 15-18 years. Boys come from a variety of backgrounds, are in the care of the Local Authority and present a range of interesting challenges to those responsible for their care.

The person appointed will have a senior level of responsibility for the management of domestic organisation and welfare in the school. She should be capable of maintaining high standards in catering, health and hygiene and giving support to professional and auxiliary staff. The school is situated in attractive surroundings within easy reach of London. The post may be resident or non-resident, however, a semi-detached house is available if required. Alternative accommodation for a non-resident person can also be arranged.

Further details and informal interviews by telephoning the Principal, Mr. G. Mercer at Ware 5421. Please quote reference B.25.

Application forms from Director of Social Services, County Hall, Hatfield, telephone Hatfield 54242, extension 5448. Closing date 20th October, 1975.

Work with older Adolescents

COMMUNITY SCHOOL

An Art and Craft Teacher is required at St. John's School, Apethorpe, a Community School for 70 boys aged 15-18 yrs. As an ex-approved School, it accommodates a high proportion of delinquent and deprived children and art therapy is considered by the school to make an important contribution to the treatment of the boys.

In addition to specialising in Art, Craft and Pottery, with boys of school age and beyond, he or she will be expected to teach general subjects and assist with outward bound activities.

The School itself is set in 52 acres of beautiful countryside and has its own gymnasium, sports hall and swimming pool.

Mr. Lampard, the Headmaster, would be pleased to hear from those wishing more information or an informal visit to the School (Tel. Kings Cliffe 283).

SALARY: BURNHAM BASIC GRADE PLUS EXTRA RESIDUS DUTY ALLOWANCE (£16 hours weekly) £279 p.a.

APPROVED SCHOOL ALLOWANCE £584 p.a.

HOLIDAY: 8 weeks annually

Application forms from the Personnel Officer, County Secretary's Dept., County Hall, George Row, Northampton.

LEEDS CITY COUNCIL

DEPARTMENT OF SOCIAL SERVICE

THORPARCH GRANGE SCHOOL

Boston Spa, Wetherby, Yorkshire

2 TEACHERS

Ref. TES/C07

Burnham Scale 1, plus £64 p.a. Community Home School allowance, plus £876 p.a. extensive duties allowance.

Two teachers are required for the above Community Home School for 78 boys aged 10 to 16. The teachers will be involved in the total care and education of boys who are academically and socially disadvantaged. Most of the teaching is individual and remedial with the boys in small groups; we require teachers for basic subjects and with specialism in Woodwork in one of the posts.

The successful candidates will be required to participate in extensive duties amounting to an average of 16 hours per week. During these duties teachers join the residential care staff with house groups assisting with the boys' personal development and recreational activities.

Single accommodation is available within the school and a house will be available for one applicant at low rental, or married applicants may make their own arrangements locally. Further details and application forms from Mr. R. W. Underwood, Headmaster, at the above address, to whom they should be sent, or to the Education Officer, Leeds City Council, Leeds LS2 9BT, to whom they should be sent, or to the Education Officer, Leeds City Council, Leeds LS2 9BT, to whom they should be sent, or to the Education Officer, Leeds City Council, Leeds LS2 9BT, to whom they should be sent.

Closing date: 10 days after appearance of this advert.

Southwark Catholic Children's Society

ST. VINCENT'S

Castle Road, Tankerton, Whitstable, Kent

A Challenging Position!

A confident, professionally minded, qualified teacher, capable of handling classes of difficult boys (aged 10-15 years) who have severe emotional and/or educational problems, is required at the above Catholic Community Home which provides education on the premises for 36 boys. Must be a practising member of the Roman Catholic faith. Woodwork and/or Physical Education are essential.

SALARY: Burnham Scale 1 plus A.S.A. £564 p.a. There is a possibility of Extranet Duties, for which an allowance of £775 p.a. is payable for an average of 15 hours per week.

ANNUAL LEAVE entitlement is 8 weeks.

F.N.C. Conditions of Service apply.

Informal preliminary discussions can be arranged by contacting the Principal (Tel. Whitstable 2900).

Further details and application form can be obtained from: The Director, Southwark Catholic Children's Society, Russell Hill Road, Purley, Surrey CR2 2XB.

Mid Glamorgan COUNTY COUNCIL

DEPUTY WARDENS

(Attached to Hawthorn Comprehensive School) Pontypridd

BLANWYNN COUNTY YOUTH CENTRE (Attached to Blawey Secondary School) Abertawe

Candidates must be qualified teachers with experience (part or full-time) of youth leadership.

The successful candidates will be placed on the Authority's teaching staff and seconded for duties in the Youth Service, with a view to after a period of five years of returning to full-time teaching. Consideration will be given to further secondment at this stage.

Salary: Burnham Scale 1, plus allowance of £400.

Further particulars, together with application forms (to be returned by 16th October, 1975) obtainable from the undersigned on receipt of a stamped, addressed foolscap envelope.

County Hall, Cathays Park, Cardiff CF1 3NP.

COUNTY OF SOUTH GLAMORGAN Education Department

Applications are invited from men and women for the following two posts in the County's Youth Service. Applicants should be qualified and experienced Youth Leaders or Teachers.

(i) Area Youth Organiser

based at the Waterhall Youth Centre for the Fairwater district of Cardiff.

Salary Burnham Scale IV for a qualified teacher or PE Lecturer 2 for a qualified youth leader.

(ii) Centre Warden, Llanrumney

to assist the Area Youth Organizer in the development of the Llanrumney Youth Centre in Cardiff.

Salary Burnham Scale II for a qualified teacher or PE Lecturer 1 for a qualified youth leader.

Appointments will be from 1 January, 1976. Application forms and further particulars may be obtained from the Director of Education, Education Department, Kingsway, Cardiff, to whom completed forms should be returned within ten days of the appearance of this advertisement.

ADULT EDUCATION
Appointments continued

KENT
COUNCIL
EDUCATION DEPARTMENT
THAMES DIVISION
HILLINGDON ADULT EDUCATION
COUNCIL
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Hillingdon
Council, Hillingdon, Middlesex.
Closing date: 15th October 1975.

MANCHESTER
COUNCIL
EDUCATION DEPARTMENT
ADULT EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Manchester
Council, Manchester, Greater
Manchester.
Closing date: 15th October 1975.

LONDON
E.A. HOUSING ADULT
EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, London
Council, London.
Closing date: 15th October 1975.

MANCHESTER
COUNCIL
EDUCATION DEPARTMENT
ADULT EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Manchester
Council, Manchester, Greater
Manchester.
Closing date: 15th October 1975.

NOTTINGHAMSHIRE
COUNCIL
EDUCATION DEPARTMENT
ADULT EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Nottingham
Council, Nottingham.
Closing date: 15th October 1975.

Community Homes and Associated Institutions

KENT
COUNCIL
EDUCATION DEPARTMENT
THAMES DIVISION
HILLINGDON ADULT EDUCATION
COUNCIL
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Hillingdon
Council, Hillingdon, Middlesex.
Closing date: 15th October 1975.

MANCHESTER
COUNCIL
EDUCATION DEPARTMENT
ADULT EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Manchester
Council, Manchester, Greater
Manchester.
Closing date: 15th October 1975.

LONDON
E.A. HOUSING ADULT
EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, London
Council, London.
Closing date: 15th October 1975.

MANCHESTER
COUNCIL
EDUCATION DEPARTMENT
ADULT EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Manchester
Council, Manchester, Greater
Manchester.
Closing date: 15th October 1975.

BUCKINGHAMSHIRE
COUNCIL
EDUCATION DEPARTMENT
ADULT EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Buckingham
Council, Buckingham.
Closing date: 15th October 1975.

Community Homes and Associated Institutions

KENT
COUNCIL
EDUCATION DEPARTMENT
THAMES DIVISION
HILLINGDON ADULT EDUCATION
COUNCIL
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Hillingdon
Council, Hillingdon, Middlesex.
Closing date: 15th October 1975.

MANCHESTER
COUNCIL
EDUCATION DEPARTMENT
ADULT EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Manchester
Council, Manchester, Greater
Manchester.
Closing date: 15th October 1975.

LONDON
E.A. HOUSING ADULT
EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, London
Council, London.
Closing date: 15th October 1975.

MANCHESTER
COUNCIL
EDUCATION DEPARTMENT
ADULT EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Manchester
Council, Manchester, Greater
Manchester.
Closing date: 15th October 1975.

M.A.Y.C. WESSEX
REGIONAL
EDUCATION COMMITTEE
ADULT EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, M.A.Y.C.
Wessex, Bournemouth.
Closing date: 15th October 1975.

Community Homes and Associated Institutions

KENT
COUNCIL
EDUCATION DEPARTMENT
THAMES DIVISION
HILLINGDON ADULT EDUCATION
COUNCIL
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Hillingdon
Council, Hillingdon, Middlesex.
Closing date: 15th October 1975.

MANCHESTER
COUNCIL
EDUCATION DEPARTMENT
ADULT EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Manchester
Council, Manchester, Greater
Manchester.
Closing date: 15th October 1975.

LONDON
E.A. HOUSING ADULT
EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, London
Council, London.
Closing date: 15th October 1975.

MANCHESTER
COUNCIL
EDUCATION DEPARTMENT
ADULT EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Manchester
Council, Manchester, Greater
Manchester.
Closing date: 15th October 1975.

LANCASHIRE
COUNCIL
EDUCATION DEPARTMENT
ADULT EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Lancashire
Council, Lancashire.
Closing date: 15th October 1975.

Community Homes and Associated Institutions

KENT
COUNCIL
EDUCATION DEPARTMENT
THAMES DIVISION
HILLINGDON ADULT EDUCATION
COUNCIL
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Hillingdon
Council, Hillingdon, Middlesex.
Closing date: 15th October 1975.

MANCHESTER
COUNCIL
EDUCATION DEPARTMENT
ADULT EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Manchester
Council, Manchester, Greater
Manchester.
Closing date: 15th October 1975.

LONDON
E.A. HOUSING ADULT
EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, London
Council, London.
Closing date: 15th October 1975.

MANCHESTER
COUNCIL
EDUCATION DEPARTMENT
ADULT EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Manchester
Council, Manchester, Greater
Manchester.
Closing date: 15th October 1975.

WEST SUSSEX
COUNCIL
EDUCATION DEPARTMENT
ADULT EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, West Sussex
Council, West Sussex.
Closing date: 15th October 1975.

Community Homes and Associated Institutions

KENT
COUNCIL
EDUCATION DEPARTMENT
THAMES DIVISION
HILLINGDON ADULT EDUCATION
COUNCIL
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Hillingdon
Council, Hillingdon, Middlesex.
Closing date: 15th October 1975.

MANCHESTER
COUNCIL
EDUCATION DEPARTMENT
ADULT EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Manchester
Council, Manchester, Greater
Manchester.
Closing date: 15th October 1975.

LONDON
E.A. HOUSING ADULT
EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, London
Council, London.
Closing date: 15th October 1975.

MANCHESTER
COUNCIL
EDUCATION DEPARTMENT
ADULT EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Manchester
Council, Manchester, Greater
Manchester.
Closing date: 15th October 1975.

ROYAL COUNTY OF BERKSHIRE

Youth and Community Service

The population of Berkshire is approximately 650,000 and includes urban areas in the East of the County including Slough, Reading, Maidenhead, Windsor, Wokingham, Woodley and the new town of Bracknell. West of Reading the Newbury District Council covers the more rural parts of Berkshire.

The Youth and Community Service is a combination of Local Education Authority and Voluntary Organization. Applications are invited from suitably qualified persons to fill existing vacancies within a large team of professional workers.

On this occasion selected applicants will be invited to spend 40 hours in Berkshire from 18 November to 18 December 1975, to gain an understanding of the opportunities that exist within the county and to decide which of the vacant posts they find attractive.

Vacancies

1. Youth and Community Worker, Central Club, Reading. JNC Range III, 1 to 5, £3,426-£3,888.
2. Youth and Community Worker, Southcoats Youth Club, Reading. JNC Range III, 1 to 5, £3,426-£3,888.
3. Youth and Community Worker, Crescent Club, Reading. JNC Range III, 1 to 5, £3,426-£3,888 (salary being reconsidered).
4. Warden, Maidenhead Youth and Community Centre. JNC Range III, 1 to 5, £3,426-£3,888 plus London Weighting £141 (salary being reconsidered).
5. Deputy Warden, Maidenhead Youth and Community Centre. JNC Range III, 1 to 5, £3,426-£3,888 plus London Weighting £141 (salary being reconsidered).
6. Youth Worker, Brighthelm Boys Club, Slough. JNC Range III, 1 to 5, £3,426-£3,888 plus London Weighting £141.
7. Second Detached Youth Worker—Reading Area Counselling Service. JNC Scale II, £2,712-£3,537.
8. Deputy Warden, Wokingham Youth and Community Centre. JNC Scale II, £2,712-£3,537.
9. Youth and Community Worker, South Reading Youth and Community Centre. JNC Range III, 1 to 5, £3,426-£3,888.
10. Senior Youth Worker, Central Slough. JNC Range III, 1 to 5, £3,771-£4,248 plus London Weighting £141.

Further details and application forms available from the Director of Education (YCS), Education Department, Kenilworth House, 80/82, King's Road, Reading RG1 3BL. Closing date for receipt of entries is 31 October 1975. Applications at your earliest convenience will be appreciated.

Assessment Centres

DERBYSHIRE
COUNCIL
EDUCATION DEPARTMENT
ADULT EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Derbyshire
Council, Derbyshire.
Closing date: 15th October 1975.

MANCHESTER
COUNCIL
EDUCATION DEPARTMENT
ADULT EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Manchester
Council, Manchester, Greater
Manchester.
Closing date: 15th October 1975.

LONDON
E.A. HOUSING ADULT
EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, London
Council, London.
Closing date: 15th October 1975.

MANCHESTER
COUNCIL
EDUCATION DEPARTMENT
ADULT EDUCATION
Applications for the post of
Adult Education Lecturer in
English, to be made to the
Director of Education, Manchester
Council, Manchester, Greater
Manchester.
Closing date: 15th October 1975.

LANARK Sub-Region

COMMUNITY EDUCATION SERVICE
L/EDU/45 **ASSISTANT AREA ORGANISER**
L/EDU/46 **SENIOR C.E. ASSISTANT (GARRISON ACADEMY)**
L/EDU/47 **MANAGER (SHOTT'S YOUTH/COMMUNITY CENTRE)**
L/EDU/48 **ASSISTANT MANAGER (KEY YOUTH CENTRE, EAST KILBRIDE)**

Salary Scale for all posts: £3,474-£3,825. Grade: AP III.

Rented public authority housing may be made available. Removal expenses, mortgage facilities and life assurance schemes are in operation.

Application forms and further particulars may be obtained from the Assistant Director of Manpower Services, Regional Offices, Hamilton, ML3 6AG, to whom completed forms should be returned by 20th October 1975.

NOTE: Further particulars in respect of other vacancies in the Community Education Service may also be obtained from the same address.

DUNBARTON Sub-Region

MANAGER
AUCHINAIRN COMMUNITY EDUCATION CENTRE
Salary Scale: £3,474-£3,825. Grade: AP III.

MANAGER
KIRKINTILLOCH COMMUNITY EDUCATION CENTRE
Salary Scale: £2,891-£3,474. Grade: Y.L. (plus £200 responsibility payment).

The Managers are responsible for the administration and programming of the centres and the deployment and supervision of full-time and part-time staff within the centres. The centres provide a wide and varied programme of activities and the Managers will be expected to sustain and develop the programme and liaise with Voluntary Organisations and other community groups. Applicants should hold a Diploma in Youth/Community Service or equivalent and have not less than two years' full-time experience in the field.

ASSISTANT MANAGERS

HELENSBURGH COMMUNITY EDUCATION CENTRE
KIRKINTILLOCH COMMUNITY EDUCATION CENTRE
Salary Scale: £2,891-£3,474. Grade: Y.L.

The Assistant Managers will work under the direction of the Manager of the centre and assist in the management, organisation, administration and programming of the centre and in the part-time duties of staff to gain experience of management and leadership. Applicants should hold a Diploma in Youth/Community Service or equivalent and have not less than two years' full-time experience in the field.

Applicants should hold a Diploma in Youth/Community Service or equivalent. Application forms and further particulars may be obtained from the Assistant Director of Manpower Services, Regional Offices, Hamilton, ML3 6AG, to whom completed forms should be returned by 13th October 1975.

R. M. McCULLOCH,
Director of Manpower Services.

Primary Teacher Education Kenya

TEACHER EDUCATORS
Mathematics
Science
English

At various Primary Teacher Training Colleges, in the subject to participate in the British Primary Teacher Training Programme, which involves Inservice Teacher Training and elements of curriculum reform directed at improving the quality of primary education. Applicants, under-graduate with 6 years relevant experience, two of which should have been in a Teacher Training College; non-graduates must have experience in a U.K. College. For the Science post, trained teachers in Physical Science (Physics/Chemistry or Biology/Agriculture) as well as General Science are invited to apply. Appointments for 2-3 years.

Salary in range £4,567-£7,094 p.a. which includes an allowance, normally tax free, in the range £2,292-£4,302 p.a. Terminal gratuity 25% of basic salary.

Other benefits include free family passages, paid leave, children's education allowances and subsidised accommodation. Superannuation rights may be preserved. An appointment grant of up to £300 and an interest free car purchase loan of up to £900 may be payable in certain circumstances. Applicants should be citizens of the United Kingdom.

For full details and an application form please apply to the following details of age, qualifications and experience:

Appointments Officer,
Ministry of Overseas Development,
Room 301, Elford House,
Ship Lane, London SW1E 6DH.

GERMANY
The Centre for
British Teachers in Europe Limited

The Centre wishes to recruit up to 25 British teachers to teach English in Secondary Schools and Further Education establishments in the Federal Republic of Germany. These vacancies are in Gymnasien in Nordrhein-Westfalen and in Berufsbildende Schulen in Nordrhein-Westfalen.

Qualifications
Applicants must possess a university degree, a teaching qualification and some teaching experience. All candidates should have a good working knowledge of spoken German.

Salary Range
Gymnasien and Berufsbildende Schulen: £275-£385 per month free of income tax (the Mark has been converted at 5.6 to the pound).

Length of Contract
Contracts will be for eighteen months starting with an Orientation Course in Germany on 19th January 1976. There may be the possibility of a few twelve month contracts starting from the same date.

For details and application forms: The Centre for British Teachers in Europe Limited (TJ1), Quality House, Quality Court, Chancery Lane, London WC2A 1HP. Tel.: 01-242 2982.

TEAM WORKER

An interesting role of a team worker in a youth centre in London Borough of Lambeth. The team worker will be responsible for the day-to-day running of the centre and for the supervision of the staff. The team worker will be expected to sustain and develop the programme and liaise with Voluntary Organisations and other community groups. Applicants should hold a Diploma in Youth/Community Service or equivalent and have not less than two years' full-time experience in the field.

Applicants should hold a Diploma in Youth/Community Service or equivalent. Application forms and further particulars may be obtained from the Assistant Director of Manpower Services, Regional Offices, Hamilton, ML3 6AG, to whom completed forms should be returned by 13th October 1975.

R. M. McCULLOCH,
Director of Manpower Services.

CANARY ISLES

THE BRITISH SCHOOL
Tel: 01-242 2982

Required January 1976, or earlier. T.E.F. TEACHER for a wide range of subjects. Experience with international schools. Salary £2,712-£3,537 p.a. plus £1,000 p.a. for housing and £1,000 p.a. for travel. Applications to be made to the Director of Education, Canary Islands, Canary Islands.

ARABIAN GULF

THE SHARIAN ENGLISH SCHOOL
Tel: 01-242 2982

Required January 1976, or earlier. T.E.F. TEACHER for a wide range of subjects. Experience with international schools. Salary £2,712-£3,537 p.a. plus £1,000 p.a. for housing and £1,000 p.a. for travel. Applications to be made to the Director of Education, Arabian Gulf, Arabian Gulf.

ENGLISH INSTRUCTOR (Qatar)

Faculty of Education, Doha
Degree in English with post-graduate TEFL qualification and experience.
Salary: £5,110-£6,307 p.a. tax free.
Benefits: free furnished accommodation; car allowance; free medical service; passage-paid annual leave. Three-year contract renewable. 75 AU 21.22

Schoolteachers (Cyprus)

Turk Maarif Koluji, Nicosia
Co-educational day school for Turkish Cypriots aged 12-18.
a. Teacher of English
b. Teacher of Chemistry
c. Teacher of Biology
Graduates in relevant subject with teaching qualification and some experience; men preferred.
Salary and allowances: £2,473-£3,943 p.a.
Benefits: rent and children's allowances; resettlement grant. Two-year contract, renewable. 75 SS 155, 159

Cheshire County Council

Maccalesfield District Youth and Community Service

COMMUNITY BASED YOUTH WORKER

ALDERLEY EDGE
Salary Scale J.N.C. Range 2 £2,712-£3,537 (Re-advertisement)
We are looking for a qualified Youth Worker who is interested in working within a village community and who will be expected to support and co-ordinate much of the youth work presently being sponsored by the Churches and other bodies.
An advisory panel will be established to offer the opportunity of support for the worker in service training opportunities exist within the County and a co-ordinate supervision scheme covering for those workers seeking an advisory form of support.
For further details telephone: Winslow 8601 Monday or Tuesday 10.00 am to 4.00 pm. Alternatively write enclosing a recent S.S.E. to the District Education Officer, Cheshire County Council, Chapel Lane, Winslow SK9 7PL. Closing date for applications: 15th October 1975. Forms should be returned by 22nd October.

WIMBORNE

HARLEQUIN CLUB
The Harlequin Club is a voluntary organisation which provides a wide range of activities for young people in the area. The Club is looking for a Youth Worker to be responsible for the day-to-day running of the Club and for the supervision of the staff. The Youth Worker will be expected to sustain and develop the programme and liaise with Voluntary Organisations and other community groups. Applicants should hold a Diploma in Youth/Community Service or equivalent and have not less than two years' full-time experience in the field.

Applicants should hold a Diploma in Youth/Community Service or equivalent. Application forms and further particulars may be obtained from the Assistant Director of Manpower Services, Regional Offices, Hamilton, ML3 6AG, to whom completed forms should be returned by 13th October 1975.

R. M. McCULLOCH,
Director of Manpower Services.

Overseas Appointments

LEBANON
BRUNNMAN HIGH SCHOOL
PRINCIPAL
The post of PRINCIPAL of this school is vacant in the summer of 1976. The successful candidate will be responsible for the day-to-day running of the school and for the supervision of the staff. The Principal will be expected to sustain and develop the programme and liaise with Voluntary Organisations and other community groups. Applicants should hold a Diploma in Youth/Community Service or equivalent and have not less than two years' full-time experience in the field.

Applicants should hold a Diploma in Youth/Community Service or equivalent. Application forms and further particulars may be obtained from the Assistant Director of Manpower Services, Regional Offices, Hamilton, ML3 6AG, to whom completed forms should be returned by 13th October 1975.

R. M. McCULLOCH,
Director of Manpower Services.

Lecturer in English & Educational Studies (Seychelles)

Seychelles Teacher Training College, Mahé
To teach English to 'O' level and lecture in Educational Studies. Degree in English and teaching qualifications essential. Experience in remedial or compensatory education desirable. Preferred age range 25-50.
Salary: £2,268-£3,668 p.a. approx.
Benefits: tax free allowance £828-£2,154 p.a.; children's education allowance; appointment grant; terminal gratuity. Two or three-year contract. 75 HT 5

Lecturers/Consultants (Cyprus)

The Pedagogical Institute, Nicosia
Three posts as follows:
a. Planning and application of educational reform
b. Educational evaluation and testing
c. Teaching of science in secondary education.
Graduates with teaching qualification and experience in teaching and teacher training, age range 35-55 preferred.
Salary: £4,264-£5,524 p.a.
Benefits: overseas and children's allowances; free accommodation. Two-year contract with possibility of renewal. 75 ST 13-15

Lecturer in English and Methodology (The Gambia)

Yundum Teacher Training College
To teach a general English and methodology to student primary teachers. Degree in English or primary teaching experience and Diploma in Education essential. Experience in a Teacher Training College desirable. Preferred age range 35-55.
Salary: £1,000-£1,947 plus 10% COLA.
Benefits: tax-free allowance £1,050-£2,652 p.a.; children's education allowance; terminal gratuity. Two-year contract. 75 HT 10

Lecturer in English—ESP (Egypt)

Department of English, University of Alexandria
Graduate with TEFL qualification and 5 years' university TEFL experience, plus experience of training local staff.
Salary: £4,264-£5,524 p.a. tax free.
Benefits: free furnished accommodation; overseas and children's allowances. One-year contract, renewable. 75 AU 89

English Instructor (Qatar)

Faculty of Education, Doha
Degree in English with post-graduate TEFL qualification and experience.
Salary: £5,110-£6,307 p.a. tax free.
Benefits: free furnished accommodation; car allowance; free medical service; passage-paid annual leave. Three-year contract renewable. 75 AU 21.22

Handwritten note: 10/10/75



MINISTRY OF DEFENCE
SERVICE CHILDREN'S
EDUCATION AUTHORITY

AREA EDUCATIONAL PSYCHOLOGIST (MEDITERRANEAN GARRISONS)

Applications are invited from fully qualified Educational Psychologists with some local authority experience to be based at the Headquarters British Forces Cyprus in Episkopi.

SALARY is in accordance with Salary Scales and Service Conditions of Inspectors, Organisers and Advisory Officers of Local Education Authorities, i.e. £3,225-£5,670 p.a. In addition a London Allowance of £151 p.a. is paid. A tax free Foreign Service Allowance is also payable.

The appointment is supernumerary under the Teachers' Superannuation Act. Official accommodation is provided rent free. The initial engagement is for 3 years.

Application forms and further information are obtainable on request to Ministry of Defence, CM(S)4(L), Room 342 Lucan House, Thornbury Road, London, WOL 8RY and completed applications should be returned to this address not later than 10 days from the date of this publication quoting reference AW/1374.

AUSTRALIA

New South Wales
Department of
Technical and Further Education

Teachers of Mining

Applications are invited for the above positions.

SALARY £10,593 per annum range \$A13,111 per annum. Commencing salaries are determined in accordance with qualifications and experience and may be up to the maximum of the range.

Qualifications:

- Degree or Diploma in Mining or equivalent sufficient to satisfy the requirements of the Council of Engineering Institutions for registration as a Chartered Engineer (C.Eng.) and membership of the Institution of Mining Engineers.
- A Colliery Manager's Certificate together with sound industrial experience, preferably in mechanized mines.
- Ability to teach Mining Surveying to the standard of the Mine Surveyor's Certificate of the New South Wales Department of Mines would be an advantage and applicants offering qualifications in Mine Surveying sufficient to meet these needs may be considered.

Experience:

As the student body in the Division of Mining largely comprises Coal Mining Certificate (Undermanagers) and Mine Deputy students, it is desirable, but not essential, that applicants should have some teaching experience in these fields.

Location: Initial appointments will be to Belmont and Wollongong Technical Colleges.

Conditions:

- Career salary scale and promotion opportunities.
- Security of employment.
- Excellent superannuation, subject to certain conditions.
- Eleven (11) weeks annual leave.
- Liberal sick and long service leave benefits.

Interviews will be held in London by an officer familiar with the requirements of the position, local industrial and domestic conditions.

Subject to certain conditions the successful applicants will be eligible for:

- Payment of fares to Sydney.
- Financial assistance towards cost of removal expenses.
- Financial assistance towards initial accommodation expenses.

For further information and application form telephone or write to the Recruitment Section, New South Wales Government Offices, 88 Strand, London WC2N 8LZ (Tel: 01-539 6051), where applications close on FRIDAY 7th NOVEMBER 1975. When telephoning or writing please quote reference 44/809 (TES).

AUSTRALIA Education Department of Victoria

The Education Department of Victoria seeks a small number of teachers for service in Primary and Secondary schools to take up employment in mid-April, 1976.

Free air travel to Melbourne, Victoria, for the teacher (and dependants, if necessary) will be provided in return for the teacher's agreement to contract to teach until December, 1977.

Permanent appointment to the Education Department of Victoria can be arranged if the teacher decides to settle in Victoria.

Salaries offered are in the range of \$7,525 Australian to \$11,400 Australian according to qualifications and experience.

Qualifications—teachers for service in Primary schools will be expected to have completed a full three years of approved tertiary teacher training.

Teachers for service in Secondary schools will require a Degree, together with a Post-Graduate Certificate in Teacher Education or its equivalent. Only Secondary teachers offering English, Mathematics, Physical Sciences, Physical Education or Music will be selected on this occasion.

Interested teachers should write in the first instance to the Official Secretary, Agent-General for Victoria, Victoria House, Melbourne Place, Strand, London WC2B 4LG, giving brief details of their qualifications and experience. Inquiries should be received before Friday, October 17, 1975.

Technical Education Indonesia

TECHNICAL EXPERTS Mechanical-Electrical

At a Technical Training Centre to assist with aspects of the operation of workshops and laboratories; to ensure that all staff are conversant with commissioning, operation and limitations of equipment; to establish student training programmes; supervision of equipment maintenance; observation of safety rules, visits to Secondary Schools; liaison with local industry. Applicants, aged over 30, should have HNC and CGI full technological certificate in a relevant subject; and a Teacher Training Certificate. An apprenticeship training desirable, followed by 5 years' trade experience and at least 3 years' teaching experience which has included operation and organisation of a workshop in a technical institution. Appointment for 18 months.

Salaries will be in excess of current UK earnings plus a tax-free overseas allowance. Superannuation rights may be preserved. Other benefits include free family passages, paid leave, children's education allowances, and free accommodation and medical attention. Applicants should be citizens of the United Kingdom. For full details and an application form please apply giving details of age, qualifications and experience to:

Appointments Officer,
Ministry of Overseas
Development
Room 317/RDC, Eland House,
Stag Place, London SW1E 5DH



Education Overseas

Botswana

A country about the size of France, in Southern Africa, with a generally sub-tropical climate.

TEACHERS

Woodwork and technical drawing
Mathematics English
Development studies
Science (Physics, Chemistry or Biology)

To teach their respective subjects up to 'O' level. Applicants, age 25-45, must be qualified teachers, preferably graduates, but college-trained teachers with at least three years secondary teaching experience should apply. Salaries in range £1,714-£2,250 p.a. which includes an allowance, normally tax free, in range £162-£1,880 p.a. Terminal gratuity 25% of basic salary. Appointments for 2-3 years.

EDUCATION OFFICERS (Administrative) (a) Agricultural Studies (b) Social Studies

Within the Ministry of Education, in their respective subjects, to carry out inspections, review and regrade syllabi; advise on textbooks; produce supportive material; guide and assist teachers; organise and conduct in-service courses; assist with selection of candidates; carry out policies of the Ministry. Applicants, age 25-50, must have a minimum of 5 years teaching experience in an appropriate subject; experience as an Inspector an advantage. For the Social Studies post applicants must have a degree in History and Geography, majoring in either subject, preferably with a senior degree.

Salary in range £2,888-£3,340 p.a. which includes an allowance, normally tax free, in range £408-£1,600 p.a. Terminal gratuity 25% of basic salary. Appointments for 2-3 years.

Other benefits (all posts) include free family passages, paid leave, children's education allowances and subsidised accommodation. An appointment grant of up to £300 may be payable in certain circumstances. Applicants should be citizens of the United Kingdom. For full details and an application form please apply giving details of age, qualifications and experience, and indicating post concerned to:

Appointments Officer,
Ministry of Overseas
Development
Room 304, Eland House,
Stag Place,
London SW1E 5DH



TEACHING IN ZAMBIA

... In the year-round sunshine offers attractive contract employment prospects, good salaries, tax-free 25% gratuity, lower income tax, free passages and baggage allowance, guaranteed accommodation - and an opportunity to use your qualifications and experience in challenging work in our new developing nation.

TEACHERS for 'O' level classes

Subjects:-
Industrial Arts (Woodwork, Technical Drawing, Metal Work), Homecraft, Art (English and History), Physical Education, Science (Mathematics, Physics, Chemistry, Biology and Agriculture), Geography, Commerce (Shorthand and Typing).

Qualifications:-
Applicants should possess either a Degree and a full Graduate Certificate or Diploma, or teaching experience in a relevant subject, or a recognised Teacher's Certificate. Teachers may be asked to serve anywhere in Zambia, in a large established school in an urban or rural area or in a completely new school in a remote rural area. Many secondary schools are for boarders and all teachers are expected to make an energetic contribution to the life of the school community, outside the classroom and to be able to adapt their teaching in a practical way to the environment of the pupils, especially in the rural areas.

Salaries:-
Starting salaries are related to qualifications and experience. In addition there is a 25% TAX FREE gratuity. Salaries for trained teachers with 5-9 years experience are up to £3,388 (C2400). Salaries for graduates are up to £3,388 (C2400). Salaries for trained non-graduate teachers are up to £2,888 (C2050). Supplement up to £1,160 (married) or £1,008 (single).

Tax Free Supplements
These are paid by the British Government to designated British nationals. The amount payable, which is under review, is related to salary. Designated officers also receive an appointment grant, education allowance, loan, medical aid assistance and free holiday visits for children educated in Britain.

Please send full personal and professional details (without obligation) and indicate the position which interests you. Full details will be sent to you. Recruiting Officer, Zambia High Commission, 7-11 Cavendish Place, London W1.



JAMAICA

Wanted for 1st October, 1976, the following subjects:
(1) **DEVELOPMENT**
(2) **EDUCATION**
(3) **BIOLOGY**
(4) **PHYSICS**
(5) **CHEMISTRY**
(6) **MATHEMATICS**
(7) **TECHNICAL EDUCATION**
(8) **ARTS**
(9) **COMMERCE**
(10) **INDUSTRIAL EDUCATION**
(11) **PHYSICAL EDUCATION**
(12) **SPORTS**
(13) **RECREATION**
(14) **TRAVEL**
(15) **TOURISM**
(16) **ENTERTAINMENT**
(17) **THEATRE**
(18) **MUSIC**
(19) **DANCE**
(20) **LANGUAGE**
(21) **RELIGION**
(22) **ETHICS**
(23) **CIVICS**
(24) **CITIZENSHIP**
(25) **GOVERNMENT**
(26) **LAW**
(27) **PSYCHOLOGY**
(28) **SOCIOLOGY**
(29) **ANTHROPOLOGY**
(30) **ARCHAEOLOGY**
(31) **PALEONTOLOGY**
(32) **STRATIGRAPHY**
(33) **GEOMORPHOLOGY**
(34) **CLIMATOLOGY**
(35) **METEOROLOGY**
(36) **HYDROLOGY**
(37) **SOIL SCIENCE**
(38) **AGRICULTURE**
(39) **FISHERIES**
(40) **FORESTRY**
(41) **MINING**
(42) **QUARRYING**
(43) **CONSTRUCTION**
(44) **MANUFACTURING**
(45) **TRANSPORT**
(46) **COMMUNICATIONS**
(47) **POWER**
(48) **WATER SUPPLY**
(49) **WASTE DISPOSAL**
(50) **ENVIRONMENTAL SCIENCE**
(51) **PLANNING**
(52) **RESEARCH**
(53) **TECHNOLOGY**
(54) **INNOVATION**
(55) **CREATIVITY**
(56) **PROBLEM SOLVING**
(57) **DECISION MAKING**
(58) **CRITICAL THINKING**
(59) **ANALYTICAL THINKING**
(60) **SYNTHETIC THINKING**
(61) **IMAGINATIVE THINKING**
(62) **EMOTIONAL THINKING**
(63) **INTUITION**
(64) **INSIGHT**
(65) **WISDOM**
(66) **KNOWLEDGE**
(67) **UNDERSTANDING**
(68) **APPRECIATION**
(69) **RESPECT**
(70) **EMPATHY**
(71) **COMPASSION**
(72) **CHARITY**
(73) **GENEROSITY**
(74) **SELFLESSNESS**
(75) **ALTRUISM**
(76) **COOPERATION**
(77) **TEAMWORK**
(78) **LEADERSHIP**
(79) **MANAGEMENT**
(80) **ORGANISATION**
(81) **PLANNING**
(82) **DELEGATION**
(83) **COORDINATION**
(84) **CONTROL**
(85) **EVALUATION**
(86) **REVISION**
(87) **IMPROVEMENT**
(88) **INNOVATION**
(89) **CREATIVITY**
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(94) **SYNTHETIC THINKING**
(95) **IMAGINATIVE THINKING**
(96) **EMOTIONAL THINKING**
(97) **INTUITION**
(98) **INSIGHT**
(99) **WISDOM**
(100) **KNOWLEDGE**

Applicants should be fully qualified teachers with at least 5 years' experience in the subject concerned. They should be able to teach in a school where the medium of instruction is English. They should be able to teach in a school where the medium of instruction is English. They should be able to teach in a school where the medium of instruction is English.

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